

THE EVOLUTION OF JOINT OPERATIONS DURING THE CIVIL WAR

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ABSTRACT

THE EVOLUTION OF JOINT OPERATIONS IN THE U.S. CIVIL WAR by LCDR Michael A. Reed, 148 pages.

History has demonstrated that amphibious assaults are among the most complex and challenging of all joint operations. The myriad of factors that evolved independently throughout the war did not become fully integrated until the winter of 1864-65. This thesis explores the maturation of joint amphibious operations during the U.S. Civil War, specifically through the assaults on Fort Fisher. This analysis will use modern joint doctrine as the framework to compare and contrast the two assaults. It will elaborate on how seaborne assaults differ from riverine assaults. Utilizing Fort Fisher as the focus develops an understanding of the interrelationship of these various factors and the challenges posed in their synchronization to achieve success. This study concludes that the operations reflected jointness, but also marked the emergence of modern amphibious assault concepts.

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ACRONYMS

ACT	Acting
Adm	Admiral
Bde	Brigade
Brig.Gen	Brigadier General
C2	Command and Control
Capt	Captain
Cmdr	Commander
CO	Commanding Officer
Co	Company
COG	Center of Gravity
Col	Colonel
Commo	Commodore
CSA	Confederate States Army
CSS	Confederate States Ship
Div	Division
DP	Decisive Point
FLOT	Flotilla
Gen	General
JP	Joint Publication
LOC	Line of Communication
LOO	Line of Operation
Lt	Lieutenant
Lt.Cmdr	Lieutenant Commander

Lt.Col	Lieutenant Colonel
Lt.Gen	Lieutenant General
LZ	Landing Zone
Maj	Major
Maj.Gen	Major General
ME	Main Effort
MSTR	Master
NGFS	Naval Gunfire Support
Reg	Regiment
RMA	Revolution in Military Affairs
SQDN	Squadron
USA	United States Army
USS	United States Ship
Vol	Volunteer
XO	Executive Officer

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CHAPTER 1

INTRODUCTION

The capture the port of Wilmington, North Carolina January 1865 during the American Civil War resulted from a combined amphibious assault on nearby Fort Fisher. Despite the complexity and advanced nature of joint operations, the two Union assaults at Fort Fisher were the largest opposed amphibious assault in history until World War I. During the Civil War joint operations were also commonly described as combined operations. Regardless of this difference, this study will refer to all such operations as joint versus combined.

Accordingly, current joint doctrine for the U.S. military provides a roadmap to analyze both assaults at Fort Fisher. This framework will facilitate a critical look at the battles at Fort Fisher, to determine if the operations waged against Fort Fisher qualify as joint operations. What issues prove relevant to the classification of the December and January assaults? The research will look at previous assaults by the U.S. military prior to the Civil War starting with a previous landing near Vera Cruz during the Mexican War to establish context for amphibious experience. How did the realization of the capability impact the American military institutionally? Was there a standard operational practice for joint operations during the Civil War? How did the lack of doctrinal procedures impact and advance combined operations and amphibious operations? A review of the Union military's strategic, operational, and tactical objectives will serve as additional points of analysis. Finally, the analysis will show that the joint operation at Fort Fisher is both significant and relevant for study by military professionals today.¹

The Antebellum Army and Navy

Seventy-eight years after America emerged from the revolution that formed the fledgling nation, the second revolution erupted. The outbreak of the Civil War caught officers who lead the militaries of both sides unprepared for the total war that ravaged the nation for the next four and half years. The standard tactics and procedures up to and throughout the Civil War came from drill manuals, but primarily from the previous military experience of the officers themselves and not from published doctrine.²

Theoretical training in the art of war is a cornerstone of the service academies today. Conversely, time devoted to this sort of study during the antebellum era was minimal. The primary area of study for would-be officers during the 19th century focused on engineering and coastal fortifications. Of the eight established military academies, including the Naval Academy (the youngest of the military schools), most taught the theories of General Antoine-Henri Jomini whose concepts originated during the Napoleonic wars. To emphasize, the established principles for conducting operations during this period remained rooted in the leaders' prior military service and experience. Formal doctrinal publications and approaches were not adopted until well after the Civil War.³

Despite the lack of formal doctrine, both principal branches of the U.S. military managed to achieve considerable operational and tactical competence during the war. Napoleonic style planning and organization prior to the Civil War was non-existent for the simple reason that America's security challenges and wars were on a very small scale. Nonetheless, study of Napoleonic campaigns remained a valuable aspect of education in the academies. Both branches of the military relied primarily on the experiences of senior

officers for policy and procedures on the conduct of operations. The varied personal experience of each leader prevented common approaches from developing.⁴

The majority of the antebellum period focused the military into compartmented and small-scale operations of frontier security. This constabulary style employment constrained most operations to company sized maneuvers. The vast expanse of the 19th century American frontier kept the majority of the army disbursed across thousands of miles of frontier. The Navy spent the majority of its time up to the Civil War fighting to maintain its size. The principal realm of naval operations was relegated to operations far from the American coast and occasionally Caribbean operations. The Navy and Army both suffered from questions as to the loyalty of their officers at the onset of the war. The limited scope of pre-war operations also precluded inter-service training opportunities.⁵

The few adversaries that the United States engaged in combat operations against during the antebellum period failed to challenge this general assessment. The results of the variety of policies essentially stalled any progressive military development. Routinely overlooked, the Army's only acknowledged adversaries were Indians, and only if they infringed upon westward expansion. The one real military campaign occurred in Mexico and laid the groundwork for future joint operations in terms of officer and institutional experience.⁶

The fundamental departure point for joint operations remained the cooperation of military services in a single battle. The key feature that made these operations combined instead of joint was the lack of a unified commander with authority over both land and sea forces. Military organizations operated with very simple (compared to today)

command and control structures and typically defaulted to loosely coordinated, but separate, Army and Navy operations.⁷

On the other hand modern joint operations have a clearly defined a unified command structure. They operate under the constraints of the twelve principles of joint operations, which clarified many aspects of the operation. These elements are: objective, mass, economy of force, security, surprise, simplicity, unity of command, maneuver, offensive, restraint, perseverance, and legitimacy. These elements are a sort of checklist to focus the operation and maximize resources. The reader will note that they are derived from Jomini's principles of war which makes them very pertinent and appropriate for use by institutions that had a passing familiarity with Jomini's ideas, especially the officers from West Point who, for the most part, led the U.S. Army during the Civil War.⁸

The amphibious landing at Veracruz during the Mexican war in March 1848 identified many obstacles which ranged from strategic and operational command and control problems to the identification of tactical objectives. By the outbreak of the Civil War most of the operational and tactical lessons learned from the Mexican War had been lost. The majority of the senior leadership involved in the Veracruz landing retired or went on to other endeavors. The remaining junior officers from the expedition became the leaders in the Civil War. They based their expectations and formulated their plans based on those experiences and lessons of that campaign—the majority of which were from the tactical, not operational, perspective of a junior officer.⁹

The Veracruz expedition clearly demonstrated the necessity of a central or unified commander, with the authority to manage the inter-service relationships and maximized the unity of effort. Lieutenant General Winfield Scott informally filled this role for the eastern

campaign and performed well in this capacity. Unity of joint command proved to be the most essential element of future amphibious operations, especially given the lack of formal doctrine to govern joint operations. The clarity of command and control proved essential in decentralized operations given the distances the sea lines of communication covered. Despite confusion in strategic guidance on the priorities between geographically separated campaigns during the Mexican conflict, Scott overcame most of his challenges with detailed plans and constant communications to subordinate commanders and his Navy counterparts.¹⁰

Fort Fisher

The location of Fort Fisher at the mouth of Cape Fear made it a decisive point. However, its criticality to the defense of Wilmington, the South's only major port remaining by late 1864 made it of key operational importance. The Confederacy recognized the critical vulnerability that the loss of Fort Fisher, and subsequently loss of Wilmington, will have on the sustenance of the Confederacy's war effort. By early 1864, General Robert E. Lee recognized Wilmington as more valuable than Richmond itself.¹¹

The political background for the assaults on Fort Fisher has relevance. It was an election year and three and a half years into a protracted war. The political concerns of the Lincoln administration impacted heavily on operational direction and tactical objectives. The sustained period without a clear Union tactical victory, contributed in the selection of the campaign's various leaders.¹²

Assumptions and Limitations

It is assumed that the comparison of General Grant in his role then to the role encompassed in current doctrine by the unified commander is valid. Grant exercised both specified and implied authority over army and naval forces. The criteria for classification of a joint operation are based on the definition of joint operations listed in JP 3-0, *Joint Operations* [see Glossary]. The assumption in this study is that the Fort Fisher assaults satisfy these basic criteria. The participation of two departments in operations or activities is only part, the application of the twelve principles are key as well.¹³

There are only two significant limitations to an analysis of this operation. The first is the lack of formal doctrine from the period. The second and more significant limitation is the application of modern doctrine as a framework of analysis for events that have no contextual relationship with how that doctrine was created. Finally, as with any research, the potential for bias exists. The focus of this research is to determine if the assaults were or were not joint, not to assign blame on individual commands decisions. That said, such critical assessments as the evidence may support in passing will be made—but they are not the focus.

Structure

The study assesses a historical framework to better understand current doctrine. Chapter 2 will first briefly review the relevant literature, including Joint Doctrine and its fundamental elements. It will then address the issues involved in conducting operations with and without doctrine. Chapter 3 will focus on the historical background to the Fort Fisher campaign from the Mexican War experience of amphibious operations at Vera Cruz up to 1864. Then, using the established framework, it will critically analyze the two

assaults on Fort Fisher, North Carolina in Chapter 4 and 5. Chapter 6 will then further analyze the historical evidence to see if either assault met the established criteria for a joint operation. Fort Fisher is a superb candidate for evaluation because it has numerous areas that might be fruitful to compare and contrast because there were two assaults. The study will also broach the subject of revolutions in military affairs (RMA's) and their long and short-term impacts to both the military and the amphibious assaults.

Significance of the Study

Fort Fisher as a campaign has been examined from both land naval perspectives as well as its role in the larger Wilmington Campaign. However, this study hopes to address a potential shortfall in the literature that treats the campaign holistically from a joint perspective. Chapter 2 will discuss this more fully. The study also has significance in the evaluation of joint doctrine as well as in the converse role of using joint doctrine as an analytical tool.

¹ U.S. Defense Department, Joint Publication 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2008), GL-12; Russell F. Weigley, *The American Way of War, A History of the United States Military Strategy and Policy* (Bloomington, IN: Indiana University Press, 1977), 93; K. Jack Bauer, *Surfboats and Horse Marines: U.S. Naval Operation in the Mexican War, 1846-48* (Annapolis, MD: Naval Institute Press, 1969), 236, 241-242; K. Jack Bauer, *The Mexican War, 1846-1848* (Lincoln, Nebraska: University of Nebraska Press, 1992), 77-78, 82.

² G. McWiney & P. Jamison. (1982). *Attack and Die: Civil War Military Tactics and the Southern Heritage* (Tuscaloosa, AL: University of Alabama Press 1977), 150; Weigley, *The American Way of War*, , 67.

³ Shelby Foote, *Fort Sumter to Perryville* (New York, NY: Vintage Books A Division of Random House, 1958), 48-49; James McPherson, *Abraham Lincoln and the Second American Revolution* (New York, NY: Oxford University Press, 1991), 5; McPherson, *Battle Cry of Freedom*, , 312-314, 328; *Ordeal by Fire*, 163-65, 179; Geoffrey Parker, *The Cambridge History of Warfare* (New York, NY: Cambridge University Press, 2005), 225-227; Russell F. Weigley, *A Great Civil War: A Military and Political History, 1861-1865* (Bloomington, IN: Indiana University Press, 2000), 92-95, 29-32; Weigley, *The American Way of War*, , 29-35, 80-84; McWiney and Jamison, *Attack and Die*, 145-49; Ethan S. Rafuse, *McClellan's War: The Failure of Moderation in the*

Struggle for the Union (Bloomington and Indianapolis, IN: Indiana University Press, 2005), 34, 50; Wayne P. Hughes, *Fleet Tactics: Theory and Practice* (Annapolis, MD: Naval Institute Press, 1986), 30.

⁴ Hughes, *Fleet Tactics*, 28; Parker, *History of Warfare*, , 224-225; McPherson, *Battle Cry of Freedom*, , 328-332. ; Weigley, *The American Way of War*, , 200-201, 80-81; McWiney, and Jamison. *Attack and Die*, 147.

⁵ Weigley, *History of the U.S. Army*, 197-198, 174; McPherson, *Battle Cry of Freedom*, , 313-314; *Ordeal by Fire*, 194-95; Parker, *History of Warfare*, , 224; Foote, *Fort Sumter*, 115; Welles, *D GW*, Vol I, 19; Perret, *Lincoln's War*, 51.

⁶ Weigley, *History of the U.S. Army*, 173-75; *The American Way of War* 64; McPherson, *Battle Cry of Freedom*, 3-5; Parker, *History of Warfare* 224; Bauer, *The Mexican War*, 67; Reed, *Combined Operations*, XXV, 4.

⁷ Joint Publication 1, GL-6; Joint Publication 1-02, 101, 96; Joint Publication 3-0, 3, GL-19; Reed, *Combined Operations*, 3, GL-8.

⁸ Joint Publication 1, GL-6; Joint Publication 1-02, 96, 573; Joint Publication 3-0, GL-8, GL-28, II-2-II-3.

⁹ Bauer, *Surfboats*, 75-78; *The Mexican War*, 236, 241; Weigley, *The American Way of War*, 76; *History of the U.S. Army*, 204; *A Great Civil War*, 29; McPherson, *Ordeal by Fire*, 216; McWiney and Jamison. *Attack and Die*, XII-XV, 148-150; Knox & Murray, *Military Revolution*, 75; Parker, *History of Warfare*, 223-25; Bowman, , passim; Sherman, *Memoirs*, 897.

¹⁰ Bauer, *Surfboats*, 77-78; *The Mexican War*, 237, 241-244; Joint Publication 3-0, II-3; Weigley, *The American Way of War*, 71-72.

¹¹ Joint Publication 1-02, 81, 146; Fonvielle, *The Wilmington Campaign*, 2, 36-37, 13; Foote, *Red River*, 262-63, 741; Gragg, *Goliath*, 132-33; Robinson, *Hurricane*, 51-55; George B. Davis, Leslie J Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (Washington, DC: Government Printing Office, 1891-1895), 190, 192; Robert E. Lee, *Recollections and Letters of General Robert E. Lee* (Garden City, NY: Doubleday Printing, 1924), 144; Richard B. McCaslin, *The Last Stronghold: The Campaign for Fort Fisher* (Abilene, TX: McWhiney Foundation Press, 2003), 16-19.

¹² Foote, *Red River*, 739; McPherson, *Battle Cry*, 770-773; Carl Sandburg, *Abraham Lincoln: The War Years* (New York, NY: Harcourt Brace & Co, 1939), Vol II 561-563; Weigley, *A Great Civil War*, 378-80, 356-357; Sandburg, *The War Years*, 561-63; Welles, *D GW*, Vol II 127-129.

¹³ The technical definition of joint operations is activities, operations, organizations, etc., in which elements of two or more Military Departments participate.

CHAPTER 2

DISCUSSION OF THE RELEVANT LITERATURE

Introduction

The four sections of this chapter examine the literature germane to the assaults on Fort Fisher. The first section covers specific histories on the Fort Fisher assault. The second section addresses the theory and doctrine that covers both combined and joint operations; as well as tactics and military revolutions. The third section discusses biographical works on participants important to the campaign and the final section will discuss the Official Records of both the armies and navies.

Fort Fisher Histories

The first scholarly work published on the assaults of Fort Fisher did not occur until 1991, when Rod Gragg released his, *Confederate Goliath: The Battle for Fort Fisher*.¹ Gragg's analysis is enlightening about a somewhat forgotten battle. His work focused primarily on the army perspective. Gragg does address the significance of the seaport and the vital lifeline that the inlet provided. Even though Gragg's study did not address the issue of combined operations or the evolution of the amphibious assault, it remained the only book on the subject for a number of years.

Between 1997 and 1998, two works appeared nearly simultaneously on the topic. Chris Fonvielle's *The Wilmington Campaign: Last Rays of Departing Hope* is an account of Fort Fisher within the context of the entire Wilmington Campaign.² Fonvielle's exhaustive study went beyond the study of the two assaults on the fortresses during the winter of 1864-65 and encompassed the entire campaign to include the build up to the

sieges, and the subsequent battles into the Cape Fear Inlet. This study included dozens of fresh charts of the inlet, an analysis of the command structure, and the common soldier's perspective. Published within months of Fonvielle's work was Charles M. Robinson's *Hurricane of Fire: The Union Assault on Fort Fisher*.³ Robinson approached the topic from the naval perspective. He focused on the bloody assault by the marines and sailors who valiantly charged across a mile of hostile beach. Robinson brings a fresh perspective to the career of Rear Admiral Samuel P. Lee. Despite the value these two works bring to the battles, there is no discussion on the joint operations that were fundamental to the outcomes of both assaults.

In 2003, Richard B. McCaslin released *The Last Stronghold: The Campaign for Fort Fisher* as part of Grady McWhiney's series on Civil War Campaigns and Commanders.⁴ McCaslin's book provides no groundbreaking revelations, but he does provide a good overview of the battles and key personnel with photos and maps to enhance understanding. McCaslin's work does not directly address the topic of joint operations.

Doctrine, Theory and Equipment

On the topic of combined/joint operations during this period, there is Rowena Reed's *Combined Operations in the Civil War*, the only book length volume on this topic when published.⁵ Her work still stands as the single authoritative source on the subject of joint operations during the Civil War. Reed's work is broad in scope as it is rich in detail. Her study focuses on three areas, starting with early experiments at Forts Henry and Donelson to the Peninsular Campaign. Reed then addresses the problems that arose from the lack of strategic vision and the removal of McClellan. She concludes with an analysis of the assaults at Fort Fisher. Professor James Merrell from the University of Delaware

reviewed Reed's work in the spring of 1979 citing it as an eye opening in study of Civil War history.⁶ In the second edition release of this book, Professor John Milligan wrote a lengthy introduction and highlighted it as still the definitive book on joint operations.⁷ He notes Reed's unabashed bias toward General McClellan as the only great strategist of the war, and her position that the Peninsular Campaign was more complex than either assault at Fort Fisher. Most importantly, Reed goes beyond the simplistic retelling of an epic battle, and addresses the inherent problems of combined operations.

In 1986, Captain Wayne Hughes released *Fleet Tactics: Theory and Practice* which focused on blue water engagements throughout the history of the U.S. Navy.⁸ Naval leaders of the Civil War would have studied historical sea battles in a similar style of analysis as Hughes does in his book.⁹ He addresses the fact that most of the naval engagements of the Civil War were primarily power projection ashore as part of blockades and siege operations.¹⁰ Despite Hughes' description of this period as a crucial first step in the development of modern navies, he focuses little attention on the art of joint operations. Hughes analyzes several historical battles and addresses the relationship between the outcomes to the presence or lack of formal doctrine.¹¹

The historical analysis of any military event or battle would be remiss if it did not include the topic of the relevant military theorists of the time. The significant problem with the application of Carl von Clausewitz to the Civil War is twofold. First, his work was not available in English until 1873, when translated for wide use by Colonel J. J. Graham, so it is unlikely any Civil War Officers would have had access to his work.¹² Secondly, his work does not address joint operations in the traditional concept of interservice cooperation.

Clausewitz's contemporary Baron Antoine de Jomini, on the other hand, is relevant to the discussion of tactics and strategy development. His *The Art of War* was both widely available at the time and taught in the military academies.¹³ The Napoleonic style of fighting dominated the early battles as a result of Jomini's ideas. Although debatable, Jominian theories take a compartmented view to the conduct of war as compared to Clausewitz, but his work does discuss combined operations. Jomini describes the concept of combined army and navy force projection ashore as —descents.”¹⁴ Jomini does not devote a great deal of time or thought expanding on this concept, and describes them as seldom attempted due to the complexity of their nature.¹⁵ Aside from the stated reservations, his work is valuable and shaped the strategic viewpoint of the Civil War leaders.

One of the greatest sources of military tactics of the time are the manuals used by both armies. It was no secret that both the Union and Confederacy had sound tacticians. Grady McWhiney and Perry Jamieson's work *Attack and Die: Civil War Military Tactics and the Southern Heritage* provide a valuable source as to how the military mind viewed the tactical problems of the war.¹⁶ The techniques discussed in their book coupled with an analysis of the evolution of the tactics provide a unique insight to the period. It is an interesting point to reflect upon advanced military thought of the time and looking at these theories in retrospect.

The library of Joint Publications used by the Department of Defense clearly defines the aspects of joint operations and their specific requirements. These proved essential to the historical analyses of battles in determining the degree of current joint criteria were met. Defining terminology is most important aspect in a qualitative research project. Joint

Publication 1-02, *Dictionary of Military and Associated Terms* clearly defines the key terms and acronyms used for the joint analysis.¹⁷ Joint Publication 1, *Doctrine for the Armed Forces of the United States* and Joint Publication 3-0, *Joint Operations* defines the scope and limitations of joint operations.¹⁸ These documents range from outlining the requirements for a unified command to the twelve principles of joint operations. Another essential reference is Joint Publication 3-02, *Joint Doctrine for Amphibious Operations*, which covers the command and control (C2) aspects and the transitions required when conducting movement of troops from ship to shore.¹⁹

The last two significant volumes from the joint doctrine perspective are Joint Publication 3-31, *Command and Control for Joint Land Operations* and Joint Publication 3-32, *Command and Control for Joint Maritime Operations*.²⁰ Both are essential when dissecting both land and sea elements of the assaults on Fort Fisher, and outline decisive points that are necessary to commanding large forces in combined or joint operations. The application of these concepts is only a framework for the analysis.

On the larger issue of war as an agent of change, MacGregor Knox and Williamson Murray compare and contrast the concepts of military revolutions and revolutions in military affairs (RMA) in their book *The Dynamics of Military Revolution 1300-2050*.²¹ The value of Knox and Murray is in the criteria they use to analyze an RMA. The book is a key accomplishment in looking at war in a different way across the levels of war. The significance to the RMA theory remains best stated in Murray and Knox book.

Revolutions in military affairs require the assembly of a complex mix of radical, organizational, doctrinal, and technological innovation in order to implement a new conceptual approach to warfare or to a specialized sub-branch or warfare.²²

Knox and Murray's definition of an RMA and RMA-type innovations, when applied to the Civil War, suggests that the evolution of joint amphibious operations attained RMA-type status. To claim that all joint operations during the Civil War were local ad-hoc evolutions implies there were no formally planned joint operations. The evolution of joint amphibious operations to the point reached at Fort Fisher, where forces successfully planned and conducted an opposed joint amphibious operations is worth analyzing via the criteria for an RMA.

Spencer Tucker's work *A Short History of the Civil War at Sea* offers invaluable insight to the technological developments of the navy's ships and its weapon systems during the Civil War.²³ He convincingly demonstrates how the U.S. Navy significantly contributed to the successful outcome of the Civil War for the North. Tucker also explores the building and development of the largest navy in U.S. history to that time. He then explores the outcomes of key naval battles at sea and in harbors. Tucker also explores the roles ships played in the blockade, securing key operational ports and logistical distribution centers, and the impact they had on the war effort.

In conflicts, the best portrayal of the personal element is from the actors who participated in the event. Admiral David Porter put his accounts to paper in 1894 in his *Naval History of the Civil War*, before the events faded and became embellished.²⁴ His account must be taken with a degree of apprehension given it is his view of events, so it is subject to his personal bias. Porter's account of the battles from the naval perspective provides an element of insight that only professional mariners can provide. Admiral Porter also provides a degree of explanation of why he chose a particular course of action over

another, which is invaluable when taken in context of possible bias. Admiral Porter's book is also a good resource of navy specific reports.

Robert Browning's in depth study *Cape Charles to Cape Fear: The North Atlantic Blockading Squadron During the Civil War* provided crucial information on the development, management, and operation of the North Atlantic Blockade Squadron.²⁵ His work delves into the creation of the Atlantic Squadron, that later splits between north and south. It discusses the essential need and development of logistical staging bases and the challenges they generated in maintaining ships on station in support of the blockade. Browning's work also provides great insight to the commanders while they commanded the squadrons, through extensive study of their personal letters exchanged between each other. His work, packed with charts and illustrations that he uses to bridge the gaps often created in the study of the naval operations, usually focused on the accounts of ironclad battles and commerce raiding. This book fills many of the gaps in Civil War naval history.

One of the most often overlooked primary sources of history is period photos. Benson Lossing's release of *Mathew Brady's Illustrated History of the Civil War* is full of this type of insight and relevance.²⁶ The value added to any history is considerable with the addition of photos, which adds a degree of realism hard to obtain by other means. There is a degree of reservation when dealing with Civil War photos, as historians acknowledge some photographers would stage bodies to enhance the sensationalism of some photos. Despite the potential pitfall of a few enhanced photos, they do provide a wealth of insight to this period of history. *Harpers Pictorial History of the Civil War* is another incredible source for public opinion of the time and the events that shaped that shaped their opinion.²⁷ The relevance of the woodcuts and sketches from the period is of significance, because it

brings in the artist's personal view and slant. Harpers pictorial collection is as insightful as Brady's pictures of the time and brings a perspective that is hard to substitute with words.

Biographical Works

The biographies, autobiographies and memoirs of significant figures provide an inside view to the personal characteristics, flaws, and leadership traits of the times they lived in. The most renowned figure during this period, and a significant participant in the decision cycle for Fort Fisher, was President Abraham Lincoln. Arguably, the best source of insight to Lincoln's presidency and his life are contained in Roy Basler's nine-volume work, *The Collected Works of Abraham Lincoln*²⁸. First printed in 1953 and remains to date one of the greatest collections of his writings. Basler in conjunction with the Abraham Lincoln Association devoted five years analyzing, transcribing, and chronicling Lincoln's life through his writings and papers.

Carl Sandburg's *Abraham Lincoln: The War Years*, released in 1939 remains a plethora of information on the President.²⁹ He exerted painstaking effort in gathering the sources for this work and devoted an equal amount of time to verifying the accuracy of its contents. It exposes the relationship between President Lincoln and his cabinet, during both moments of fluid cooperation and periods of dysfunction. Sandburg exposes President Lincoln's personal perception of his Generals and their ability. He highlights the political pressures facing the administration during the protracted conflict, and the proportional weight of each success and failure. Sandburg uses literally hundreds of photos and cartoons of the time to attempt to fully tell the story of history, or as much as can actually be known of a time in the past. Despite his work being a secondary source, one

could also consider it one of the more valuable references given the time frame and his sources.

Professor Craig Symonds' *Lincoln and His Admiral's* provides an invaluable and up-to-date scholarly analysis of Lincoln's interaction with his navy during the Civil War.³⁰ This book addresses a key gap in the literature on the conflict. Symonds describes how Lincoln came to not only understand, but also employ, the Navy in a pivotal way during the Civil War. This study provides a tremendous reference of how the cabinet interacted and how that impacted policy and the direction of the naval war. Lincoln quickly became an advocate of the emerging technology in the Navy from the guns to the new Monitor class ships. Symonds brings to light conflict between Lincoln, Gideon Welles, and Gustavus Fox with fleet admirals. He also provides a view of the cabinet level assessment of the new ships and technology. The book also highlights the problems the new ships both solved, and failed to solve, in the blockade of the southern coastline. Finally, Symonds brings to light the significance Assistant Secretary of the Navy Gustavus Fox for high command within the Navy Department via Fox's considerable operational experience as a navy line officer.

If there was a list of important people, which listed them in sequence based on the importance of the role they played in the assault on Fort Fisher, Secretary of the Navy Gideon Welles would top that list. Gideon Welles personal diary was published 33 years after his death in 1911, by his son Edgar in three volumes.³¹ Edgar Welles made a conscious decision not to amend the diary in any fashion, except where the entries specifically were personal in nature and he so annotated in the text. Secretary Welles wrote in his diary as a source of relaxation in the evening, with no plans to publically release its

contents. The entries reveal the unabashed view of politicians, generals, fellow cabinet members, congressmen, and the President. This memoir is a virtual treasure trove of information on the key personnel who played any role in the sieges of Fort Fisher.

The truest insight to any commander or leader is the way he handles tough events, which shape character and experience. Chester G. Hearn's release of *Admiral David Dixon Porter* in 1996 provides this essential perspective.³² Porter was one of the Navy's most colorful and charismatic leaders and he commanded the naval armada during both sieges on Fort Fisher. Hearn's insight to the early life of Admiral Porter was invaluable to understanding his motivations, determination, and his relationships with both senior and subordinates. Hearn shows how these early experiences helped develop the audacity that Porter was (in)famous for, and that enabled his rapid promotion during the war. The greatest advantage Hearn's work provides over the two previous accounts of Admiral Porter's life is his extensive bibliography and citations, which were largely missing from earlier accounts.

Richard S. West released his book *Lincoln's Scapegoat General: A Life of Benjamin F. Butler 1818 – 1893*, with the sole purpose of clarifying the reputation of that Civil War general.³³ General Butler controversially assumed command of the first assault on Fort Fisher, and bore the brunt of its failure. West does discuss General Butler's failure at Fort Fisher as a contributing factor to his removal from command. However, the real value of this resource are the personal experiences of Butler's early life which shaped his later behavior in command. West brings out the unembellished General Butler, a self-made man and politician. West highlights the fact that President Lincoln brought General Butler back from New Orleans due to political pressure, not necessarily disapproval of his

performance. West identifies General Butler's inability to work well with both his peers and seniors.

General Ulysses Grant published his memoirs *Personal Memoirs of U.S. Grant*, in 1885 and provides valuable insight to his command perspective.³⁴ His role in the Civil War as General in Chief was pivotal, and with this expanded role, an informal centralized command was established. General Grant, upon assuming this new role of General in Chief, was able to achieve unity of effort to a much greater degree than any of his predecessors. The benefit of a unified commander will be apparent during analysis of the assaults on Fort Fisher. General Grant's assessments and interaction with his subordinates and the President are brash and straight forward.

General William T. Sherman released his, *Memoirs of General W. T. Sherman* first in 1875, and then revised them in 1886.³⁵ Great men have a sounding board to vet ideas and help maintain perspective, and for General Grant it was General Sherman. The generals became close friends during the battle at Shiloh, and corresponded frequently. The exchange between the two is intelligent and refreshingly honest. The revealing descriptions show very complex and deep thinking men, caught in a tumultuous time. General Sherman provided a resource that his close friend General Grant utilized frequently. The two exchanged opinions of the Fort Fisher assault, and expressed their reservations about the venture to each other. The book is insightful as it provides a perspective of a significant leader in the assault from the perspective of a friend.

Official Records

The largest source of information and records for this period are the Official Records of the Civil War, released in 70 sections and 128 volumes.³⁶ It is a storehouse of

records, after action reports, official orders, and correspondence between generals and the administration. It does not limit itself to Union or Confederate reports only, but instead lists all of the available reports in chronological order. Despite the meticulously painstaking effort in the consolidation of records, it is a challenge to sort out the myriad of valuable source documents. To compound this problem the Official Records of the Navies was completed and released 26 years later in 31 volumes.³⁷ The disparity is the difference in the organization of the information within, because it is as indispensable as the records of the armies.

The Report of the Joint Committee on the Conduct of the War: The Fort Fisher Campaign is volume five of a multi-volume set of official records and findings on specific campaigns and operations.³⁸ In addition to the Southern Historical Society Papers, a 52-volume set of official records from the southern point of view is another rich source of information.³⁹ Despite the quantity of information, these huge works provide they are an incredible compilation of information in one source.

The Official Military Atlas of the Civil War is crucial to any battle analysis.⁴⁰ Maps and charts provide the topographical aspect to any assault. The various courses of action become clearer when viewing the problems through the geographic constraints of a map. The bottom topography of the inlet and coast proved insightful, which depicted the challenges of blockading the Cape Fear Inlet. The shallow slope of the beach off Fort Fisher, which facilitated the amphibious landing, complicated the powder boat placement during the first assault. The stipulation to be aware of when using period maps or charts is the inherent inaccuracies, and the disparity between accurate charts and actual terrain. The

benefits of accurate charts are not a substitute for actually walking the battlefield, because the terrain never looks like the map.

Conclusion

To summarize the research findings on published works, there are sufficient related works to support the proposed analysis of Fort Fisher. The fact that there is only one book length account in print of combined operations and the release date predates Joint Doctrine make this an excellent area for further research. The following chapters will explore the essential elements of joint operations and which are essential to classify an operation as joint.

¹ Gragg, *Goliath*, passim.

² Fonvielle, *The Wilmington Campaign*, passim.

³ Robinson, *Hurricane*, passim.

⁴ McCaslin, *The Last Stronghold*, passim.

⁵ Reed, *Combined Operations*, passim. Reed uses the term combined instead of the term joint which is more appropriate given the term combined means something entirely different to today's military audience.

⁶ James M. Merrill, "Untitled Review of Combined Operation in the Civil War," *Society for Military History*, 1979: 108.

⁷ John D. Milligan, *Introduction to Combined Operations in the Civil War* (Lincoln, NE: University of Nebraska Press, 1993), IX.

⁸ Hughes, *Fleet Tactics*, passim.

⁹ The U.S. Naval Academy was not established until 1845, and Admiral Porter was a Commissioned Midshipman on 2 February 1829; Chester G. Hearn, *Admiral David D. Porter: The Civil War Years* (Annapolis, MD: Naval Institute Press, 1996), 11.

¹⁰ Hughes, *Fleet Tactics*, 58.

¹¹ *Ibid.*, 24.

¹² Bassford, Christopher. *The Clausewitz Homepage* ; Naval War College. 30 April 2008. <http://www.clausewitz.com/CWZHOME/VomKriege2/ONWARTOC2.HTML> (accessed 21 October 2008); Carl Von Clausewitz, *On War (Vom Kriege)* (New York, NY: Oxford University Press, 2007), passim.

¹³ Antinione Henri De Jomini, *The Art of War* (El Paso, TX: El Paso Norte Press, 2005), passim. See also Russell Weigley's discussion of the educational syllabus at West Point in *The American Way of War*, passim.

¹⁴ Antinione Henri De Jomini, *The Art of War* (El Paso, TX: El Paso Norte Press, 2005), 199.

¹⁵ Ibid., 199.

¹⁶ McWiney and Jamison, *Attack and Die*, passim.

¹⁷ Joint Publication 1-02, passim.

¹⁸ Joint Publication 1, passim; Joint Publication 3-0, passim.

¹⁹ Department, U.S. Defense, Joint Publication 3-02, *Joint Doctrine for Amphibious Operations* (Washington, DC: Government Printing Office, 2008), passim.

²⁰ Department, U.S. Defense, Joint Publication 3-31, *Command and Control for Joint Land Operations* (Washington, DC: Government Printing Office, 2004), passim; Department, U.S. Defense, Joint Publication 3-32, *Command and Control For Maritime Operations* (Washington, DC: Government Printing Office, 2008), passim.

²¹ Knox & Murray, *Military Revolution*, passim.

²² Williamson Murray and Allan R. Millett, *Military Innovation in the Interwar Period* (New York, NY: Cambridge University Press, 1996), 12.

²³ Spencer Tucker, *A Short History of the Civil War at Sea* (Wilmington, DE: Scholarly Resources, 2002), passim.

²⁴ David D. Porter, Admiral, *Naval History of the Civil War* Edited by A Division of Book Sales Inc. (Secaucus, NJ: Castle Books, 1984), passim.

²⁵ Robert M. Browning, *From Cape Charles to Cape Fear: The North Atlantic Blockading Squadron During the Civil War* (Tuscaloosa, AL: University of Alabama Press, 1993), passim.

²⁶ Benson J. Lossing, L.L.D, *Mathew Brady's Illustrated History of the Civil War, 1861-65, and the causes that led up to the Great Conflict* (Washington, DC: The Fairfax Press, 1978), passim.

²⁷ Alfred H. Guernsey and Henry M. Alden, *Harpers Pictorial History of the Civil War* (New York: Crown Publishing, Inc, NY, 1866), passim.

²⁸ Roy P. Basler, *The Collected Works of Abraham Lincoln* (New Brunswick, NJ: Rutgers University Press, 1953), passim.

²⁹ Sandburg, *The War Years*, passim.

³⁰ Craig L. Symonds, *Lincoln and His Admirals: Abraham Lincoln and the U.S. Navy, and the Civil War* (New York, NY: Oxford University Press, 2008), passim.

³¹ Welles, *D GW*, passim.

³² Hearn, *Admiral David D. Porter*, passim.

³³ Richard S. West, *Lincoln's Scapegoat General, A Life of Benjamin F. Butler 1818-1893* (Cambridge, MA: The Riverside Press Cambridge, 1965), passim.

³⁴ Ulysses S. Grant, *Personal Memoirs of U.S. Grant* (New York, NY: Charles L. Webster & Co., 1894), passim.

³⁵ Sherman, *Memoirs*, passim.

³⁶ Department, U.S. War. *War of the Rebellion, The Official Records of the Union and Confederate Armies*, 70 (128 Parts) vols. (Washington, DC: Government Printing Office, 1880-1901), passim.

³⁷ Department, U.S. Navy. *Official Records of the Union and Confederate Navies in the War of the Rebellion*, 31 vols. (Washington, DC: Government Printing Office, 1894-1927), passim.

³⁸ Congress, U.S. *The Fort Fisher Expedition: Report of the Joint Committee of the Conduct of the War*, 38th Congress, 2nd Session (Wilmington, NC: Broadfoot Publishing, 1999), passim.

³⁹ Southern Historical Society. *The Southern Historical Society Papers, A Compilation of the Official Records of the Confederate Armies* (Milwood, NY: Kraus Publishing, 1887-1910), passim.

⁴⁰ George B. Davis, Leslie J. Perry, and Joseph W. Kirkley. *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), passim.

CHAPTER 3

BACKGROUND INFORMATION

Introduction

The development of joint operations during the Civil War was arguably a revolution in military affairs. What systematic factors influenced the Union forces for four years in their attempts to refine the process enough to make it an RMA? President Lincoln recognized several areas that required development by the administration. The time required to raise, organize, train, and develop both the army and the navy promised to be lengthy. The introduction of technological developments further complicated the endeavor. The list of reasons that delayed the evolution of joint operations was diverse.¹

President Lincoln found himself in charge of a military that was functional, but completely unprepared for the ensuing conflict. The cabinet that he selected for counsel in conducting the war was both new and parochial, which created internal strife and competing agendas. Each department had its own divergent priorities and competing objectives, which seldom were supportive of each other. This internal strife fueled by self-serving priorities and an unwillingness to work together in a unified fashion between the War and Navy departments, in particular.²

Union Strategy evolved over the course of the war. It started with Lieutenant General Winfield Scott's Python Plan, later renamed the "Anaconda Plan" in the press.³ The strategy hinged upon an effective Union blockade to economically strangle the Confederacy and force their return to the Union. Scott discussed the plan with McClellan after overall command of the Union Armies passed to him in May of 1861. Although, McClellan's strategy was fundamentally different, he kept the blockade and expanded it.

He recognized the strategic economic effect a blockade could achieve. Although Secretary of the Navy Welles and Assistant Secretary Fox had concerns in the ability of the small Navy to effectively impose the blockade, they recognized its strategic necessity.⁴

The general state of the military during the antebellum years contributed to the lack of strategic planning. The navies on both sides were undermanned and poorly equipped, but the industrial might of the north rapidly rectified this dilemma for the Federal forces. The technical innovations that emerged from the industrial revolution initially appeared beneficial. The problem with any new technology is that until the organization fully understood the capabilities, the new technology was often more of a hindrance than a benefit. Militaries on both sides suffered from this on multiple fronts ranging from transportation, communication, steam propulsion, weapons, and tactics that emerged because of these new technologies.⁵

The U.S Army waged the war at an operational level with most engagements focused on geographic objectives. The tactics used during the conflict were not new, but the context within which they occurred was revolutionary.⁶ The Civil War witnessed joint amphibious landings achieve tactical and operational maturity. The development of a joint amphibious operational design was one of the war's forgotten achievements. Attempted in several theaters, joint amphibious operations, for a myriad of reasons often fell short until Fort Fisher. The Wilmington expedition, and specifically the joint assaults on Fort Fisher, validated this concept.⁷

Survey of U.S. Joint Amphibious Operations

Baron Antoine-Henri de Jomini was aware of amphibious operations (descents), and discussed the advantages and complexities, associated with them, but classified them

as too complicated for practical application. The development of an effective projection of combat power capability on hostile shores through joint amphibious operations had not matured; but the U.S. Navy was interested from the start in pursuing the endeavor.

America first embarked upon joint amphibious operations during the Revolutionary War. Nearly 70 years later General Winfield Scott would accomplish an unopposed amphibious landing near Veracruz, Mexico. However, the standardization of joint amphibious assaults did not become part of formal doctrine until the interwar period of the 20th century.⁸

The principal operational experience for joint amphibious operations came during the war with Mexico from 1846-1848. Scott selected Collado Beach for the landing of his invasion army for many reasons. The offshore Sacrificios Islands provided a sheltered topography and protection from the surf. The site was two and a half miles southeast of the first operational objective of Scott's campaign, Veracruz. The landing site allowed an unopposed landing and remains a textbook example of coordination and execution. From its inception, the expedition overcame many obstacles. Planning of the landing was essentially ad hoc and by default that approach became the accepted pre-Civil War standard for joint amphibious operations. However, the steps that followed proved instructive. Upon the arrival of Scott and his naval counterpart, Commodore David Conner the expedition's staff surveyed the beach area. The concentration of enemy artillery and the rate at which the Mexican defenders adjusted their aim contributed to Scott's decision to land unopposed at Collado Beach. On 9 March 1847, Scott put 8,600 troops ashore in less than five hours without the loss of a single sailor, soldier, or marine. A single unified command under Scott existed *informally*. The operation at Collado Beach validated the

concept of the unopposed amphibious landing. However, the Civil War would demand a higher standard for joint amphibious operations.⁹

The Men Behind the Plan

Article 2, Section 2 of the Constitution of the United States designates the President as the commander in chief of the military. Lincoln had little military background and depended on his cabinet to advise him on matters pertaining to the military. Welles was keenly aware of this arrangement, but also lacked significant experience with naval fighting. A shrewd judge of character, Welles recognized the value Gustavus Fox brought to the department as the new Assistant Secretary of the Navy. Fox, a former naval officer, brought eighteen years of operational naval experience to the cabinet. After Lincoln and Welles brought Fox into the Navy Department, the Navy had the civilian structure necessary to put it on a war footing.¹⁰

The War Department paid little attention to the Navy and did not initially recognize the value it brought to the war.¹¹ Although Lincoln was more attentive to his Navy than President Davis was, he routinely found himself involved with Secretary of War Edwin Stanton and operations of the Army. The precarious relationship between the departments and the President created a perceived bias inside the administration. Only through Welles and Fox, with their complimentary working relationship, did the growing Navy achieve its significant influence on the course of the war. Welles and Fox did not experience the same degree of oversight from Lincoln that Stanton did, which may explain, in part, why Welles and the Navy achieved success during the war.¹² A larger lesson might be that navies lend themselves better to decentralized command and control when performing purely maritime

functions. However, more formal procedures and lines of authority required for joint operations, had not developed.

The Nuts and Bolts of the Blockade

The blockade originated in the War Department under Lieutenant General Winfield Scott, but the execution depended on Welles and Fox. Despite Scott's advanced age, he remained a capable general with tremendous experience in war. He was also keenly aware of the political problems of a protracted conflict. Under the President's guidance, Scott recommended a less overtly destructive strategy with the blockade. This aspect of the blockade appealed to Lincoln, but they also realized time was against them.¹³

Legally the blockade was a balancing act, between a justifiable strategy and legitimizing the Confederacy. A legal blockade, under the Declaration of Paris in 1852 (which the U.S. government declined to sign), must encompass four aspects. The blockade must first be formally declared to the world, and its boundaries clearly outlined. Secondly, the blockade must be put in effect immediately after proclamation. Thirdly, it must be enforceable with means to carry out the stipulated blockade. Lastly, it must yield quantifiable results, commensurate with the purpose of the blockade. The blockade offered all of these aspects, except the means to enforce the blockade. The blockade appealed for political reasons as well. First, it demonstrated Lincoln's resolve to put down the rebellion and reunite the Union. Secondly, it would isolate the Confederacy from vital foreign markets.¹⁴

with rail distribution centers given their ability to move war materials. The other trading centers were Pensacola, Jacksonville, Savannah, New Bern, and Wilmington. Each had strategic significance from port to ship building facilities.¹⁵

The Blockade Board

Welles established the Blockade Board on 27 June 1861 to identify and proactively solve naval problems that arose during enforcement of the blockade. Welles appointed Commodore Samuel DuPont as the president of the newly established Board, which focused on developing a naval strategic plan for the war. The Board identified several requirements from increasing the number of ships suitable for participation in the blockade to suitable logistic staging bases. It divided the initial two blockade fleets into four squadrons: two on the Atlantic Coast, one northern and one southern, and two on the Gulf Coast, divided east and west. The required staging bases were located at Hatteras Inlet in North Carolina, Port Royal (once seized) in South Carolina, and Ship Island off of the Mississippi Gulf Coast.¹⁶

Union and Confederate Militaries

The majority of both Armies' regular officers graduated from West Point and other academies. This made the majority of the senior officer corps both professional officers (by the standards of the day) and versed in basic tactics and weapons employment. Although the core of the academic programs was engineering, they covered the art of war as well. The majority of the faculties advocated studying Jomini and Napoleon, the great strategists of the time. Dennis H. Mahan, essentially the academic dean of West Point, was a staunch believer in Jominian theory. Carl von Clausewitz's ideas remained relatively

unknown until the turn of the century, and his works had little impact on the leaders on both sides. A common misunderstanding, dispelled by Grady McWhiney, was that West Point focused on topics that were less relevant to the actual conduct of war. Students attending the West Point graduated as commissioned second lieutenants, not corps commanders. Company grade officers were small unit leaders and managers, not master strategists.¹⁷

The armed forces that included the Navy had challenges on the eve of the Civil War as well. The Navy had diminished in size after the Mexican War. The small fleet was scattered across the globe mostly protecting trade interests abroad. The Army, too, was a small force distributed across the frontier and limited to the role of a constabulary force. These challenges proved insignificant in comparison to the building, restructuring, and organizing required by the large militaries that emerged during the first year of the war.¹⁸

The Navies at the Start

With several ports identified by the Blockade Board as priorities, the challenge was to build a navy capable of enforcing the blockade. This challenge proved greater than anticipated. The Union Navy was completely unprepared for the war in several respects. In April 1861, ships listed on the register totaled 90, but only 42 remained in commission. Nearly 30 vessels were deployed protecting American interests. Of the remaining ships, only four were in the north. Almost immediately, Welles and Fox embarked on an unprecedented naval buildup. The Navy did not limit the numbers of ships and obtained them by any means. The scope of procurement was the first indicator of how serious the Lincoln Administration was in its mobilization for war, which proved contradictory to the limited mobilization planned in 1861.¹⁹

After six months, the operational fleet had more than tripled in size to 140 vessels and with another 50 under construction. Most were merchants and transport vessels refitted for military use. Modified civilian vessels had limited use in traditional naval roles, but were suitable for the blockade. Their shallow draft and large coal reserves allowed closer in-shore positioning and longer time on station. By 1864, the fleet had grown to exceed 650 vessels armed with a staggering 4,600 guns of various sizes. The men required by the fleet also proved equally deficient at the war's start, but increased nearly two and a half times reaching nearly 25,000 in 1861 and by war's end numbered over 100,000.²⁰

The ships supporting the blockade did reach sufficient quantity, but their numbers only highlighted the need for intermediate supply and staging in order to sustain the fleet, especially steam ships. These requirements complicated priorities for the Navy in its allocation of its precious resources. The Navy had divided the blockade into four squadrons to ease the command and control over the extensive coastline. The Atlantic squadron further divided between north and south and the Gulf Squadron remained separated between east and west. Port Royal Sound was the best choice in the South Atlantic as a logistic anchorage, because its deep-water bay was ideally suited for the newer deep draft ironclads. Although, the capture of Port Royal on 7 November 1862 still left Charleston and Cape Hatteras unsubdued, it confirmed that ships could stand up to fortresses ashore.²¹

The Armies at the Start

Secretary of War Stanton confronted similar dilemmas in the size and readiness of the army. At the start, the army was only 16,000 strong and primarily maintained as a constabulary force for the frontier. The numbers grew rapidly for both sides, but the

Confederacy had the head start in raising troops. Fort Sumter's fall initiated proclamations calling up and organizing the militias into standing armies, the numbers initially anticipated were 180,000 men.²²

Tactically, the leaders on both sides were versed in Napoleonic concepts of warfare and organizational methods. Considering the size of the armies, organization was the order of the day. It took two years for the army to establish a functional command structure. The Union had the advantage here, primarily attributed to McClellan's organization of the army. However, the Union Army adopted Napoleon's corps system as did the Confederacy. The Union army's organization was regional and restricted to the east; due to the compartmentalization of the army into theaters. The western armies did not catch up until late in the war.²³

The Union Army had five theaters with departmental commanders over their respective area, but all were equal among each other. Then the Army confronted the incredible command and control problems that arose in controlling forces larger than anticipated or trained to maneuver in battle. The concept of joint operations remained simply too advanced for the developing militaries of the first half of the war. The disparity in capability was due to a lack of opportunity to conduct and work through interoperability issues. The cohesive skills required for the Army and Navy to work together simply took time and opportunity to develop and mature. Joint operations were often so only in name as one or the other service delivered the decisive combat blow, for example the Navy at New Orleans and the Army at Fort Donelson. Even at Island Number 10 the land and water operations remained relatively compartmented.²⁴

Technical Innovations

The technical innovations of the industrial revolution ushered in an era of military transformation.²⁵ Radical improvements to weapons and the increased lethality of both rifles and cannon rendered many tactics unsuitable. Increased logistic capability enabled the sustainment of armies in sizes never seen before in U.S. history. These developments in turn exposed the problem of commanding large forces, a skill lacked by the most of the leadership of 1861. The size of armies also complicated communications as they stretched over hundreds of miles of territory.²⁶

Admiral Silas Stringham's capture of Forts Hatteras and Clark at the mouth of Pamlico Sound on 27 August 1861 demonstrated that steam powered ironclad ships could stand up to shore fortresses. The ability of ships to stand up to fortresses was the result of several advancements in Commander John Dahlgren's effort to upgrade naval weapon technology. Guns increased in size to fifteen inches and the expansion in types of shot eliminated dependency on solid shot. The introduction of rifled barrels and breach loading mechanisms further increased the lethality of naval artillery. The evolution of guns and rounds shifted the odds favorably for naval assaults, but these developments did not obviate the need for careful planning and hard fighting. Lincoln advocated Assistant Secretary of the Navy Gustavus Fox and Dahlgren's position that monitors had great promise, but successful integration of them in joint operations remained in the experimental stage. All of these advances made joint assaults not only possible but also potentially very successful.²⁷

Conclusion

By 1864, through experimentation, perseverance, and technological development, fortresses lost their inherent tactical advantage over naval assaults. Joint amphibious operations had also matured. However, the war's unpopularity grew with each day among the circles of the war Democrats. The Democratic Party courted McClellan as a political alternative to Lincoln on the ballot. Even with significant victories at Vicksburg and Gettysburg, the Confederacy was far from admitting defeat. Lincoln and the Union needed decisive victories to maintain support for the upcoming election. The new General in Chief Grant, after his great victories at Chattanooga, was now in the position to broaden strategy to include the Port of Wilmington which might provide the politically advantageous victories. Fort Fisher guarding the gates to Wilmington proved to be one of the keys to these potential victories.²⁸

¹ OR, Series I, Vol II, 603-604; E. B. Long and Barbra Long. *The Civil War Day by Day: An Almanac 1861-1865* (New York, NY: Da Capo Press, 1971), 2; Mark Grimsley. "Surviving Military Revolution: The U.S. Civil War." MacGregor Knox & Williamson Murray. *The Dynamics of Military Revolution: 1300-2050* (New York, NY: Cambridge University Press, 2001), 11-14; Parker. *History of Warfare*, 223-25; Reed, *Combined Operations*, 15; Sandburg. *The War Years*, Vol 1, 140-62; Welles, *DGW*, Vol 1, 61, 66-67.

² Porter, *Naval History*, 17-23; Sandburg. *The War Years*, Vol 1, 140-62; Weigley. *A Great Civil War*, 197-201; Welles. *DGW*, Vol 1, 81-86.

³ Browning, *Cape Fear*, 1; Symonds. *Lincoln and His Admirals*, 40-41; Weigley, *A Great Civil War*, 30, 58-60; Weigley, *The American Way of War*, 93.

⁴ Archer Jones, *Civil War Command & Strategy: The Process of Victory and Defeat* (New York, NY: Free Press, A Division of Macmillan Inc., 1992), 99-101; Porter, *Naval History of the Civil War*, 17-23; Herman Hattaway & Archer Jones, *How the North Won: A Military History of the Civil War* (Champaign, IL: University of Illinois Press, 1983), 12-19; Browning, *Cape Fear*, 1-5; ORN, Series 1, Vol 1, IX-XI; OR, Series 1, Vol LI/1, 370.

⁵ David A. Mindell. *War, Technology, and Experience aboard the USS Monitor* (Baltimore & London, MD: The Johns Hopkins University Press, 2000), 4-6; Porter, *Naval History of the Civil War*, 21-22; Canney, *Lincoln's Navy*, 1, 16-19; Weigley, *A Great Civil War*, 72-73; Tucker, *Civil War at Sea*, 1-11.

⁶ Grimsley, Knox, & Murray, *Military Revolution*, 77.

⁷ Joint Publication 3-02, I1-2; Joint Publication 3-02.2 *Joint Doctrine for Amphibious Embarkation* (Washington, DC: Grovernment Printing Office, 1993), I1-5, II1; Browning, *Cape Fear*, 301-02; Reed, *Combined Operations*, 19, 25-26, 98, 307-10; The term joint operation did not become formal until 1986 with the Goldwater-Nichols Act, and combine operations was the accepted term prior.

⁸ Jomini, *The Art of War*, 199-201; David Brownstone and Irene Franck. *Timelines of War: A Chronology of Warfare from 100,000 BC to the Present* (Boston, New York, Toronto, and London, MA: Little, Brown and Company, 1994), 6-9; Weigley, *The American Way of War*, 74-76; Tucker. *Civil War at Sea*, 6-11.

⁹ Bowman, *Who Was Who*, passim; Bauer. *Surfboats*, 70-74, 77-82; *The Mexican War*, 238-245; Joint Publication 3-02, I1, V1-V3; Weigley, *The American Way of War*, 74-76.

¹⁰ Canney, *Lincoln's Navy*, 25; Jomini, *The Art of War*, 55; Porter, *Naval History*, 17; Sandburg. *The War Years*, Vol 1, 140 passim; Weigley, *A Great Civil War*, 24; Welles, *DGW*, Vol 1, 69.

¹¹ Browning, *Cape Fear*, 1.

¹² Canney, *Lincoln's Navy*, 25; Hearn, *Admiral David D. Porter*, 71-73; David D. Porter, Admiral. *Incidents and Anecdotes of the Civil War* (New York, NY: Appleton & Company, 1891), 65; *Naval History*, 19-23; Symonds, *Lincoln and His Admirals*, 314; Welles, *DGW*, Vol 1, 69.

¹³ Browning, *Cape Fear*, 9-11; ORN, Series 1, Vol LI/1, 370; OR, Series 1, Vol V, 623-24; McPherson, *Ordeal by Fire*, 195; Tucker, *Civil War at Sea*, XII, 12; Weigley, *A Great Civil War*, 71.

¹⁴ Ibid., 5; OR, Series 1, Vol LI/1, 370; Porter, *Incidents and Anecdotes*, 55-56; William N. Still, John M. Taylor, and Norman C. Delaney. *Raiders and Blockaders, The Civil War Afloat* (Washington, DC: Brassey's, 1998), 131-35; Tucker, *Civil War at Sea*, 12.

¹⁵ Ibid., 9-11; Canney, *Lincoln's Navy*, 24-25, 48-50; ORN, Series 1, Vol I, VIII-XI. Hattaway & Jones, *Military History*, 127; McPherson, *Ordeal by Fire*, 195; Tucker, *Civil War at Sea*, 11-17.

¹⁶ Ibid., 9-11; Ibid., 32; Hattaway & Jones, *Military History*, 127; Porter, *Naval History*, 33-38; Tucker, *Civil War at Sea*, , 12-13.

¹⁷ Grant, *Memoirs*, 28-35; Alfred T. Mahan. *The influence of Sea Power Upon History: 1660-1783* (New York, NY: Dover Publications, 1987), 1-2; McWiney and Jamison, *Attack and Die*, 145-50; Rafuse, *McClellan's War*, 33-35; Sherman, *Memoirs*, 16; John C. Waugh. *The Class of 1846: from West Point to Appomattox : Stonewall Jackson, George McClellan, and their brothers* (New York, NY: Warner Books, 1994), XIII-XVI; Weigley, *The American Way of War*, 80-85.

¹⁸ Canney, *Lincoln's Navy*, 17; Porter, *Naval History*, 21-23; Tucker, *Civil War at Sea*, 1-2, 11.

¹⁹ Browning, *Cape Fear*, 10-11; Porter, *Incidents and Anecdotes*, 14-22; *Naval History*, 18, 21-23; Tucker, *Civil War at Sea*, 11-12; Weigley, *A Great Civil War*, 72-74.

²⁰ Ibid., 10; ORN, Series 2, Vol I, Part 1 passim; Hearn, *Admiral David D. Porter*, 50-52; Porter, *Naval History*, 33-38; Still, Taylor, and Delaney, *Raiders and Blockaders*, 52-54; Tucker, *Civil War at Sea*, 6-9.

²¹ Ibid., 10-15; Ibid., Series 1, Vol VI, 122; Ibid., 68-69.

²² McWiney and Jamison, *Attack and Die*, 146-150; Parker, *History of Warfare*, 23-25; Sandburg, *The War Years*, Vol 1, 210-13; Weigley, *A Great Civil War*, 55-58; *The American Way of War*, 80-91.

²³ OR, Series 1, Vol II, 763; Grant, *Memoirs*, 28-35; McWiney and Jamison, *Attack and Die*, 146-50; Rafuse, *McClellan's War*, 130-32; Sherman, *Memoirs*, 16; Robert M. Epstein. "The Creation and Evolution of the Army Corps in the American Civil War," *The Journal of Military History*, Vol 55, No 1, 1991: 21-46.

²⁴ Ibid., Series 3, Vol I, 69; Hattaway & Jones, *Military History*, 101-107; Weigley, *A Great Civil War*, 24; *History of the U.S. Army*, 197-211.

²⁵ Mark Grimsley. "Surviving Military Revolution: The U.S. Civil War." MacGregor Knox & Williamson Murray. *The Dynamics of Military Revolution: 1300-2050* (New York, NY: Cabridge University Press, 2001), 75.

²⁶ Clausewitz, *On War*, 61-63; Jomini, *The Art of War*, 51-56; McWiney and Jamison, *Attack and Die*, 27-40; Tucker, *Civil War at Sea*, 1-6.

²⁷ Browning, *Cape Fear*, 12-13; Canney, *Lincoln's Navy*, 47; ORN, Series 1, Vol VI, 120-23; Mark Grimsley. "Surviving Military Revolution: The U.S. Civil War." MacGregor Knox & Williamson Murray. *The Dynamics of Military Revolution: 1300-2050* (New York, NY: Cabridge University Press, 2001), 74-77; Parker, *History of Warfare*, , 221-23; Tucker, *Civil War at Sea*, , XIII.

²⁸ ORN, Series 1, Vol XII, 262-66; David A. Mindell. *War, Technology, and Experience aboard the USS Monitor* (Baltimore & London, MD: The Johns Hopkins University Press, 2000), 12-15; Sandburg, *The War Years*, Vol 1, 377; Still, Taylor, and Delaney, *Raiders and Blockaders*, 35-42, 50; Tucker, *Civil War at Sea*, 1-6.

CHAPTER 4

FORT FISHER AND CAPE FEAR

Introduction

The Navy's plan to seize Wilmington North Carolina had become a priority shortly after the blockade went into effect in 1861. Its priority was due to Wilmington's sheltered entrance and a railway hub for the distribution of valuable war supplies and goods. Secretary of the Navy Gideon Welles had been petitioning both the President and the War Department for troops to support a joint army and navy campaign to seize Wilmington since early 1862. Competing priorities by the army had delayed any unified action, however, to seize or neutralize the port of Wilmington.¹

In early 1863, Welles and Assistant Secretary of the Navy Gustavus Fox decided to investigate taking Wilmington without an army. Effectively blockading the port proved an insurmountable challenge due to the extensive length of coastline. This left two options for seizing control of the Cape Fear River and closing the port of Wilmington. The first choice was through Old Inlet passed Fort Caswell and the alternative was through New Inlet passing Fort Fisher. Each choice further complicated the situation by presenting two options to seize Wilmington. Either land and proceed directly to the port over land or land and siege the fortress and proceed up the Cape Fear Inlet. Formidable fortifications guarded both inlets to the Confederate's indispensable docks located twenty miles up the Cape Fear River (figure 2). In the south, guarding Old Inlet stood, Fort Campbell (1), Fort Shaw (2), Fort Caswell (3), Fort Holmes (4), Fort Johnson (5), and Fort Pender (6). To the north on New Inlet were Fort Fisher (7), Mound Battery (8), Battery Buchanan (9), Zeek's Island Battery (10), Battery Anderson (11), and Fort Lamb (12). The restricted waters and

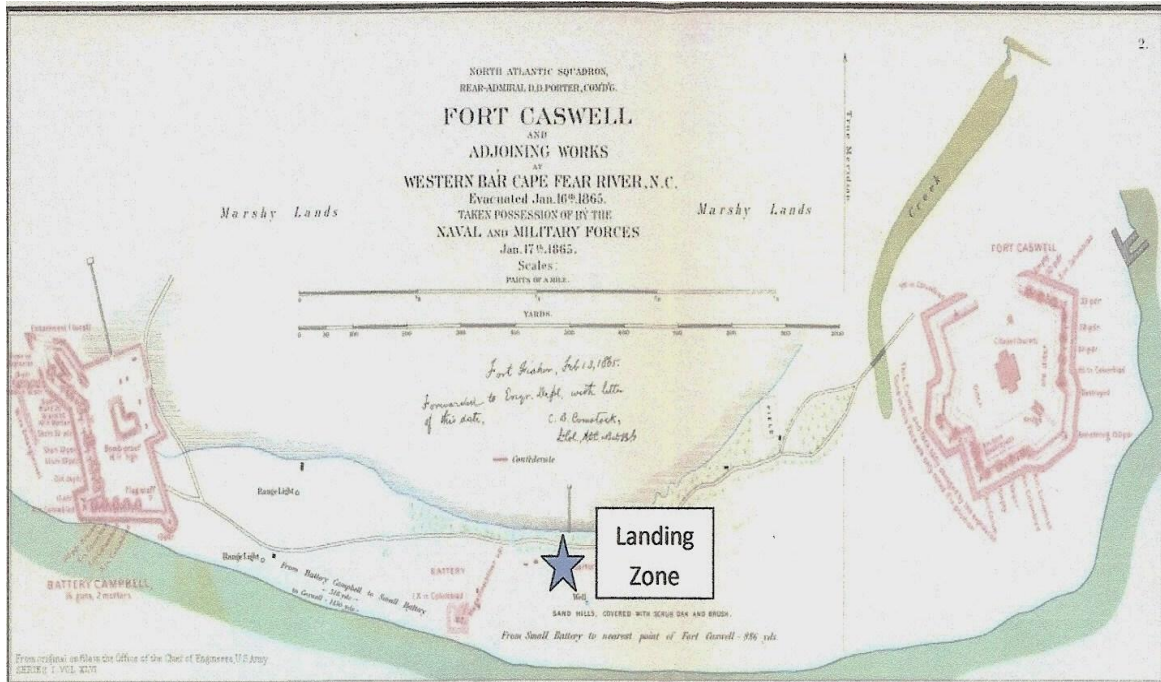


Figure 3. Old Inlet and landing zone in proximity to fortifications
 Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate CXXXII.

Admirals Samuel DuPont and Louis Goldsborough attempted to seize Wilmington using the Atlantic Blockading Squadrons in the fall of 1862. Both Welles and Fox advocated reducing the fortress with naval gunfire, but differing opinions over which inlet to attack delayed the operation. Du Pont had already proved that modern ironclads had the ability to effectively defeat fortresses at Port Royal through concentrated naval gunfire. The opportunity to attack Wilmington in this manner remained elusive between the floundering of the *USS Monitor* and shifting Navy priorities. In the end, despite Welles and Fox's efforts, the Wilmington operation needed to be a joint Navy and Army endeavor to succeed.³

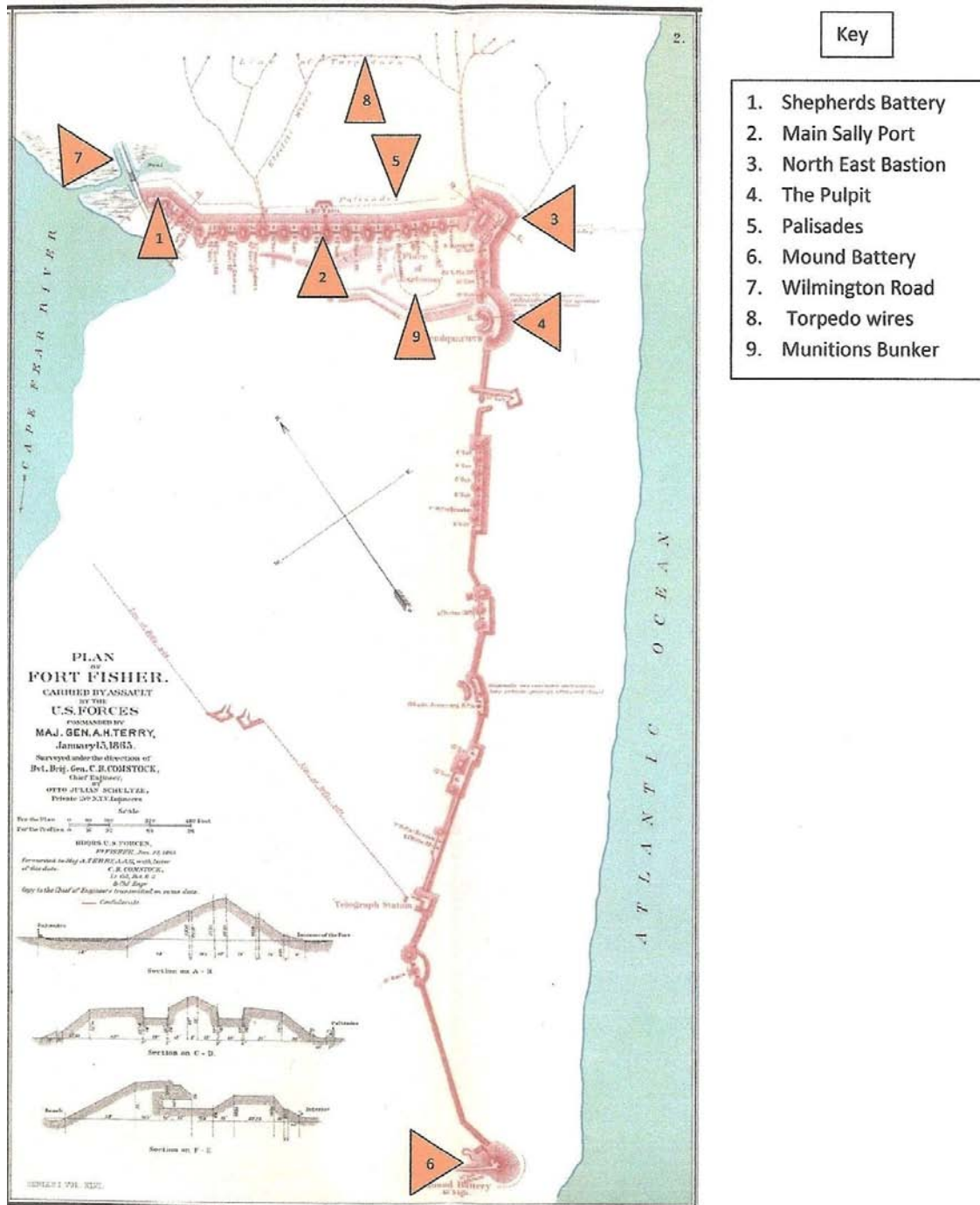


Figure 4. Fort Fisher and key features

Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXXV.

Forts Campbell and Caswell were the two substantial fortifications guarding Old Inlet. To the north of Old Inlet was Fort Campbell, Battery Shaw, and Fort Caswell (figure 3). Across the channel to the south was Fort Holmes on Smith's Island (figure 2). This restricted channel required all traffic to sail along the coast to avoid grounding. The implications of this geography forced any naval gunfire against both fortifications to occur at point blank range. In addition to restricted maneuvering, the geography subjected the assault force to direct counter fire from the fortifications' 51 guns. This concentrated eight and ten-inch caliber gunfire into an extremely narrow one-mile frontage, hardly something an assault force wished to face. The likely landing area, north of Battery Shaw, did provide marginal cover by scrub oak and brush for the landing force. Although the landing provided some cover, both Fort Campbell and Fort Caswell covered the area with heavy crossfire. The fortifications, engineered of stone and masonry, made them susceptible to heavy damage from naval gunfire. Given the proximity of the channel to the fortifications, the defenders might also inflict heavy losses on the assaulting fleet.⁴

New Inlet north of Smith's Island presented multiple challenges as well. First, it was massive, nearly half a mile across the peninsula and a mile along the seaward face. The Navy's next problem was Fort Fisher's construction. Construction of the fortress walls of sand and brush allowed it to absorb the naval gunfire, despite being incomplete. Fort Fisher's impressive armament included an assortment of 44 eight and ten inch-mounted guns. Unlike Old Inlet's defenses, Fort Fisher's seaward face (hereafter sea face) allowed an attacking fleet to standoff and suppress the defenses with minimal casualties. On the other hand, the potential landing area north of the land face lacked cover and could be opposed by troops in addition to being subjected to flanking fire from the various forts.

New Inlet also provided the possibility to sail shallow draft vessels around to flank the fortress from the rear.⁵

Neither course of action presented a clear advantage over the other. The list of unknowns was equally as long. It proved hard to determine the size of the garrison that defended each fortress. Also important was the rate the Confederates could shift reinforcing troops from one fort to another. The potential of a prolonged assault raised the issue of logistical support. Old Inlet required long lines of operation and short on station time between resupply runs. All factors considered, the odds of a successful joint operation favored Fort Fisher over Forts Campbell and Caswell.

With the port of Charleston under siege and Admiral Farragut bottling up Mobile Bay, many of the blockade runners were diverted to Wilmington; the last accessible significant port available to the Confederacy. Despite the best efforts of two capable squadron commanders and a large blockading fleet, illicit trade still flowed through Wilmington at an alarming rate. Wilmington's trading days were to be short lived, because after Farragut captured Mobile Bay, Wilmington came to center stage.⁶

The volume of trade in and out of Wilmington elevated its economic status, making it more operationally strategic than Richmond, which General Lee conveyed to President Jefferson Davis in March 1864. Between 1861 and 1864, scarcity of essential goods drove prices up astronomically. Coffee that was 13 cents a pound rose to over \$100.00 and a barrel of baking flour went from \$8 to over \$500. The profits soared to an excess of 250,000 dollars per run, making the risk worth it. Some raiders made several hundred percent in profit over the course of multiple runs. Over the course of the blockade, the British smuggled in several thousand stands of weapons and imported millions of

dollars in cotton. It seemed that despite the number of ships on blockade duty, the blockade-runners got through. People wondered if the blockaders were part of the trade. Finally, Welles and Fox had the necessary leverage to acquire the Army's participation in a joint campaign to capture Wilmington--the focus of their attack was Fort Fisher.⁷

Although the Army kept the senior generals in charge of departments, as the Navy did with squadrons, Grant exercised influence over them. This presented itself as a precarious arrangement and Lincoln was the sole unified commander over land and sea forces. Maintaining the blockade relegated the Navy to a supporting role to the army in its operations. The coming joint operations challenged this arrangement. This strained relationship required Lincoln's direct involvement at times to achieve operational goals.⁸

The Concept of Operations

In August 1864, Welles and Fox approached President Lincoln about a joint venture to seize Fort Fisher and close the port of Wilmington. After considerable deliberation, Lincoln approved the idea, but deferred the execution to Grant. The Wilmington plan initially gave Grant reservations because it drew vital troops away from his multi-front strategy. Grant conferred with Welles and Fox and agreed to review the joint operation and support it if possible.⁹ Grant drew upon resources that had served him well in the past. He sent the idea for the joint operation to General William T. Sherman, who was moving through the heart of the south toward Atlanta. Grant also discussed the plan with General Benjamin F. Butler, commander of the Departments of Virginia and North Carolina who would probably be tapped to provide the troops for the operation. Grant viewed the operation as viable, but not before mid October. Sherman liked the idea of a joint assault and believed it might aid in his plan to eventually push up through the Carolinas.¹⁰

Grant's largest obstacle in the expedition was assigning a general to lead the Army's element of the campaign (what today's doctrine calls the land component commander). This required someone both competent and audacious. By 1864, most joint operations had occurred only on rivers. Previous attempts from the sea had not yielded favorable results, for example as at Charleston in 1863. The coming election also loomed in the back of Grant's mind. Although Grant did not agree, he was aware of Lincoln's vulnerability in the upcoming election against McClellan. A failure of any magnitude, whether at Wilmington or somewhere else, would not bolster support for the war and potentially lead to a defeat at the polls.¹¹

In initial discussions of the plan with Secretary of War Edwin Stanton, Grant shared his vision of the joint operation and his concerns. Grant recognized the importance of getting the commanders to work together and understand the concept of operations, and that achieving collaboration and collegiality might prove to be a daunting task. He feared that previous successes, which came easily on the rivers, might foster similar optimistic expectations against Fort Fisher. The weather on the mid-Atlantic seaboard had challenged the most mundane operations. The operation required an updated reconnaissance of the Cape Fear Estuaries and fortifications. The inlet approaches required careful study to identify the shoals in the vicinity of the landing zone. Grant explained these requirements to Welles, Stanton, and President Lincoln.¹²

Stanton considered the issue and suggested Brigadier General Quincy A. Gilmore to Grant for the assignment. Grant did not agree he felt Gilmore lacked the experience for a campaign of this magnitude. Instead, Grant nominated Brigadier General Godfrey Weitzel, who had already assessed the operation as being achievable with 6,000 - 8,000 men. Grant

avored Weitzel's numbers and enthusiasm for the operation and ultimately Lincoln deferred to Grant's decision. This left the question of naval leadership for the joint operation.¹³

Welles' first choice, Admiral Farragut, declined due to health reasons and his ongoing engagement at Mobile Bay. This left Admirals Samuel DuPont, Samuel Lee, John Dahlgren, and David Porter. Welles saw no clear front-runner. DuPont was not viable, given he had already had an opportunity and believed Ft. Fisher could not be taken without a protracted siege--an endeavor Welles was dead set against. Lee currently commanded the North East Blockade Squadron and struggled to hold the blockade together. Dahlgren lacked the operational experience to undertake a task of this magnitude and his health suffered as well. This left the recently promoted Porter as the only remaining choice. Even with Farragut's recommendation, Porter's assignment came with controversy. Porter's previous working relationship with Grant and his (Grant's) assessment of his abilities made Welles' choice easier.¹⁴

Grant approved the commanders and submitted his recommendations to Lincoln supported by Stanton and Welles. With the joint campaign's leadership now set, it left only a date that seasonal weather patterns supported. The Commanders needed to be collocated to begin effective planning. Butler began to assemble troops, although not as quickly as Grant or Porter desired. Additionally, Grant knowingly allowed Butler's continued involvement in the campaign planning. As the plans finalized he again used Sherman as his sounding board. Sherman liked the concept of operations, but believed the combination of Butler and Porter might complicate the expedition.¹⁵

The Union's primary objective was the port of Wilmington. The first obstacles in the path were the fortifications guarding the approach to New Inlet. Fort Fisher, the new Confederate Gibraltar was the accomplishment of Colonel William Lamb. Ironically, despite Lamb's lack of engineering background, he demonstrated significant engineering prowess. The results demonstrated he understood the requirements for maritime defense and how to achieve them.¹⁶ Confederate volunteers had seized Battery Bolles from the government caretaker in January 1861. The scattered fortifications were renamed Fort Fisher after a Major Charles Fisher killed at the battle of First Manassas. The fourth of July 1862 was the turning point for Fort Fisher. This was the day that the young Colonel Lamb assumed command of the fort from Colonel Hendrick, the fort's original conqueror. Lamb, initially just another fort commander in a lengthy list, drew his inspiration from the Crimean War, a move that linked him to Fort Fisher indefinitely. He had experimented with engineering fortifications while in command of Fort St. Phillip, later renamed Fort Anderson north of Fort Fisher in 1861.¹⁷

Major General W. H. C. Whiting assumed command of the port of Wilmington on 8 Nov 1862. Initially he assessed the fort as deplorable and lacked the vision of what the fort might become. Whiting's opinion definitely changed after he came to understand the vision of the fortress commander. Lamb assembled and fortified each battery independently according to his own plan. Lamb modeled his fortress after Frantz E. I. Todleben's defensive works at Sebastopol and stymied Union efforts to effectively blockade Wilmington for some time.¹⁸

The Special Operation

Lt. William Cushing took up the challenge of covertly slipping in and out of the Cape Fear inlets to reconnoiter the defenses and survey the shoals. Dispatched by Porter, he mapped the forts and battery locations. He also conceived the idea of snatching a river pilot as well during the operation. Cushing returned with detailed soundings of both inlet approaches to the Cape Fear, in addition to the number and location of all fortifications and battery emplacements. The reconnaissance identified numerous shoals and sand bars that made navigation possibly too shallow for the deep draft ironclads. This limited naval gunfire to the seaward side at approximately a mile off the coast for most vessels. Although Cushing did not capture a pilot, he did conduct several raids along the coast. This created confusion among the Confederate forces and mislead them about the size of the Union Forces in the area. In addition to Cushing's professional accolades, he attained command of *USS Malvern*, Porter's flagship. Cushing was a complementary addition to Porter's armada. He brought an element similar to modern special operational capabilities with his willingness to attempt dangerous assignments which proved invaluable during the joint assault on Fort Fisher.¹⁹

Welles and Fox were now starting to see their vision for the neutralization of Wilmington come to fruition. The Army was providing the necessary troops and Porter had assembled the largest fleet combatant ships to date.²⁰ The joint operation conceived nearly two years earlier had finally begun. In October of 1864, the initial date of the operation, the plan became compromised allowing time to reinforce the Confederate garrison at Fort Fisher. A group of Confederate scouts sighted several warships that had started to assemble at Hampton Roads, and were outfitting for a large operation. The

reports appeared in papers in both Richmond and Wilmington. This unfortunate even delayed the operation until December.²¹

A Series of Unfortunate Events

General Butler capitalized on the campaign's delay to put his objectives in motion. First, he was looking for the opportunity to begin political maneuvers to assume the command of the operation. It seemed logical given that the men, equipment, and objective all fell within the jurisdiction of his department. Second, Butler viewed the capture of Ft. Fisher as an opportunity to atone for his controversial tenure at New Orleans and poor tactical performance at Bermuda Hundred. Butler, even with his political connections, needed a newsworthy victory to keep his chances of succeeding Edwin Stanton as Secretary of War on track. With the election over, McClellan was no longer in a position to help him politically. Another problem for Butler's political aspirations was Lincoln's habit of appointing former adversaries to his cabinet. Finally, the Ft. Fisher operation presented the opportunity for Butler to experiment with an idea that had caught his attention in early August 1864. A Confederate torpedo detonated on a Union ordinance barge docked at City Point and leveled buildings for three-quarters of a mile around the blast.²²

The concept consisted of running a vessel packed with gunpowder aground near the fortress and then detonating it. This in turn might breach the wall and allow a small contingent of troops to capture the fortress with its Confederate defenders still in a stunned state. It was the maritime version of Grant's Battle of the Carter fiasco during the siege of Petersburg. If successful, this might revolutionize joint warfare and eliminate the need for protracted sieges. The idea sounded outrageous to the conservative members of the

cabinet. Butler, an obstinate person, was tenacious once he set his mind to something. He counted on the support of his old friend Fox and believed swaying Grant was possible. This left only Lincoln, Stanton, and Welles to be convinced. Butler immediately sought credible experts to support his idea. Initially he approached General Richard Delafield the Army's Chief Engineer. However, Delafield did not believe that enough powder could be placed close enough to yield any effect. Butler then approached General Alexander Dyer, the Army's Chief of Ordnance along with Lt. Cmdr William Jeffers, a naval inspector of ordnance, but they sided with Delafield. The sole voice of support for Butler's plan came from the Washington Arsenal commander, Major James Benton. He drafted a hasty report that supported the concept as long as the detonating the vessel occurred close to the fortress walls. Butler and Benton believed the concept practicable by placing 350 tons of powder in a vessel within 300 yards of the fortress walls. Benton later conceded that his report was devoid of facts and based on no experience.²³

Butler briefed the plan to Lincoln, the cabinet, and commanders hoping for their support. Grant and Welles did not like the idea, having already read the report from Delafield. Fox was willing to support his friend, counting on reciprocity from Butler when needed. Porter seemed to be intrigued with the concept. It is uncertain if Porter went along with the idea to get the expedition underway or if he actually believed in it. Porter gained renewed faith in the concept after his inspection of the powder magazine explosion during the capture in January 1865.²⁴ Lincoln, typically, referred the final decision to Grant; he saw no real harm and believed it might get Butler moving and the expedition underway. Stanton was the sole hold out and he withheld a portion of the Army's powder designated for the charge. This doomed the experiment from the start, because the powder was now

limited to 225 tons. This required the vessel to get closer than the shoals permitted. Nonetheless, the Navy proceeded with preparing the *USS Louisiana* to resemble a blockade-runner.²⁵

Butler increased his involvement with the operation more each day as the departmental commander. By early December, Grant was well aware of Butler's intention to proceed with the expedition to Wilmington. Grant wrote to Sherman describing the powder boat plan, but despite his reservations, he was allowing Butler's experiment to proceed. Sherman's response did not address the experiment, but reiterated his belief that Porter and Butler were not suited to work together in a unified effort. Sherman also conveyed his concerns with the operation in a letter to General Henry Halleck, the Army Chief of Staff. Sherman predicted, "I take it for granted [that] the present movement on Wilmington will fail."²⁶

Near the end of November, Grant grew anxious for the operation to get underway. Lincoln added to his angst, with Welles and Fox pressuring him to force Butler to begin moving. Grant also identified a potential Confederate weakness at Ft. Fisher. He learned that General Braxton Bragg was moving a large contingent of troops from Wilmington to join with General William Hardee in an attempt to stop Sherman. Grant recognized this as an opportunity to shift the tide by striking Fort Fisher with a large contingent of its defenders away. On 4 December 1864, Grant telegraphed Butler informing him of the change in plans and to make preparations to proceed underway immediately. The telegram provided the necessary reasoning and direction to Porter to ready his fleet for sea as well (Annex A).²⁷

The First Attempt

Porter was anxious to get underway; a weather change at anytime might complicate or ruin the operation. Aware of the minimum powder requirements for the boat and knowing the last delivery was arriving late on 5 December, he made all haste to get his fleet ready. Porter had directed the removal of all flammable material from the topside areas and the gun decks, anticipating action in North Carolina. The final delivery of the powder, fuses, and trigger mechanism precluded getting underway prior to 10 December, even if Commander Alexander Rhind completed the wiring underway. When things finally started to move a storm blew in that delayed the departure of the fleet for another three days. Butler finally showed interest in getting underway and ordered his troops remain on the transport barges, despite temperatures reported by Brigadier General Charles Paine as low as -2 degrees Fahrenheit.²⁸ When the storm finally broke Porter wanting to avoid any further delays, signaled the fleet to set sail at 0800 on the 13 December 1864.²⁹

Porter telegraphed Butler and requested he delay proceeding south for a day, due to the slow speed of the low freeboard monitors and the *Louisiana* under tow, in order that all the ships might reach the rendezvous simultaneously. Butler acknowledged the request, but did not understand the reasoning behind it. He departed before dawn on 13 December and turned north executing a feint. This was fortunate as it delayed his transports several hours, but not enough. He was surprised when his transports caught up with, and then overtook, Porter's fleet steaming south. Another aspect of joint operations required learning the capabilities and limitations of your service partners; in this case, Porter's various vessels. Butler arrived on 15 December and grew impatient waiting on Porter's fleet, which did not arrive until the morning of 17 December. Butler's transports now

needed coal, food, and water, further demonstrating a lack of joint operational understanding.³⁰

Porter recommended Butler's transports anchor in Beaufort for supplies. As Butler's transports departed the area, another storm blew in, lasting until 23 December. Butler dispatched his aide, Captain Clarke with his commander's intent for the operation and to inform Porter that he would be on station by Christmas morning and commence the landing that evening. Porter acknowledged the report, but intended to detonate the powder boat at 0100 on 25 December. He planned to start bombarding the fort at 0800, to allow sufficient time for Butler to arrive on scene and affect the landing that evening. Clarke, aware of Porter's intentions, restated his concern that Butler would be unable to return until the afternoon of 25 December. Clarke departed and did not convey Porter's intentions to Butler until the morning of 25 December, due to inclement weather. By then it was too late to change the plan or allow sufficient time for Butler's transports to arrive on station. Butler was furious with Porter's decision to detonate *Louisiana* without him. Butler viewed this as another example of the Navy rushing to steal the glory from the Army.³¹

Louisiana began moving toward the shore under tow of *Wilderness* at 2130 on 23 December, with the intention of detonating it at 0100. Porter planned to commence naval maneuvers to designated gun lines at first light. Both Porter and Rhind did not trust the questionable timing clocks in the fusing system (figure 5). The original requested timing clocks did not arrive and required substitutions. Porter directed that a fire of pine knots be set in the after cabin to ensure detonation. The boat arrived at the designated point for detonation and with fuses and fire lit, the crew abandoned her. The effect was as brilliant as anticipated-- except that, the boat was anchored incorrectly, at nearly twice the distance

off the coast (figure 7), which minimized its effect. With the quantity of powder reduced, it is questionable if the results might have been different if placed correctly. The reports from captured soldiers confirmed the explosion's ineffectiveness. Most of the occupants of the rebel fort believed it to be an exploding boiler on a grounded blockade-runner. Porter later learned that reports of his Fleet had reached Wilmington on 18 December and the sighting of Butler's transports on 19 December. The Confederates knew about the impending Union joint assault, powder boat or no powder boat.³²

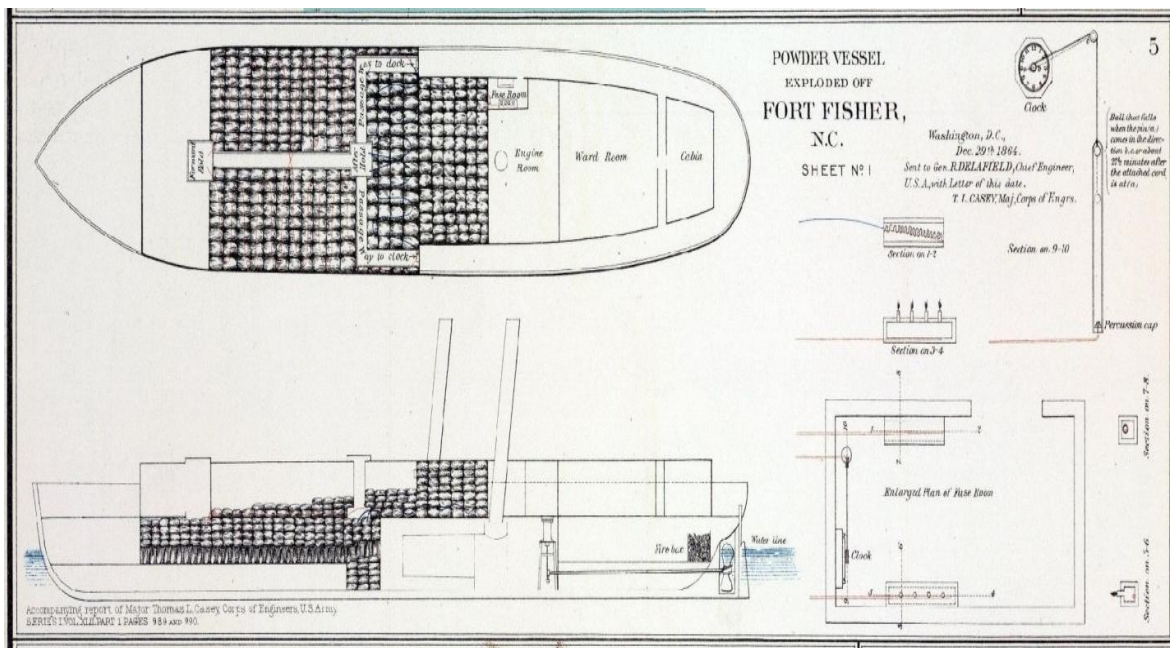


Figure 5. Louisiana (powder boat) and Fusing Mechanism

Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXVII.

At 0215, shortly after the powder boat debacle Porter signaled the fleet to make preparations to get underway at dawn and maneuver to designated battle lines. The challenge of maneuvering 64 ships in close proximity near shoal water with rudimentary

communications is a testament to Porter and his commanders' seamanship. George Dewey (later Admiral), executive officer on *USS Colorado* during the assault, reflected how impressive it was to observe Porter maneuvering his armada near the coast with nothing but signal flags and gunfire (figure 7). By 1000, the fleet was in position and awaiting favorable winds to commence the bombardment. The stalemate lasted for nearly ninety minutes before the winds shifted. The *USS New Iron Sides* fired the first shots in Porter's 619-gun barrage. The coordinated firepower wielded by Porter on this cold Christmas day was unimaginable. The fleet rained steel at rate of nearly two rounds per second for over six hours, completely neutralizing fortress defenses. The tactical promise of a combined arms assault in a joint operation seemed clear.³³

The Confederate's situation appeared dire. The sporadic nature of return fire from the fort convinced the Union forces that they wrecked several of the fortress guns. Actually, Colonel Lamb was more concerned about running out of ammunition. This resulted in his restriction to return fire only twice an hour, until the land assault commenced. This contributed to an idea that a portion of Fort Fisher's guns might have been Quaker or decoy guns (figure 6). This assumption proved fatal to the assault forces. Nevertheless, the naval gunfire did suppress the fort for the duration of the bombardment, setting the conditions for a minimally opposed landing.³⁴

Butler rendezvoused around 1600 and his transports heard the naval gunfire for over an hour before their arrival. Still irritated that Porter detonated the powder boat without him, he proceeded with preparations for the landing. Butler still thought that Porter was trying to take the fort without the army and claim all of the glory. Butler sent word that he wanted a meeting with Porter to discuss the landing, but Porter declined citing

fatigue from the day's fighting. Given the relationship between the two, and considering Porter's brash nature, this was not entirely out of character. This contributed to confusion over how to set up and organize the landing area after the beachhead was established.³⁵



Figure 6. Quaker Gun

Source: Wikipedia, "Quaker Gun," http://en.wikipedia.org/wiki/Quaker_Gun (accessed 11 December 2008).

Meanwhile, Butler and his staff engaged in a heated discussion over the assault, questioning the feasibility of any success without the element of surprise. The majority of the staff favored turning around and returning to Fort Monroe. Now with the powder boat wrecked, the tactical plan for a successful joint operation might be compromised. Colonel C. B. Comstock, Grant's Engineer was the sole dissenter who argued to land a contingent and survey the fort, making a decision based on facts and not assumptions. Comstock's logic prevailed in the end and the landing continued.³⁶

Underway at 1000 on 24 December and on the line by 1030, Porter's Fleet again began the shore bombardment led by the *New Ironsides*. Once the cannonade commenced, the rate of fire increased to the previous day's rates and quickly suppressed the fortress and its occupants. The constant barrage by naval gunfire allowed the Army and Marine contingent to land with minimal opposition and quickly established the beachhead. The naval gunfire successfully suppressed the fortress defenses creating a false sense of security for the advancing troops as they approached the palisades.³⁷

The landing started with the surfboats filled with Colonel Newton M. Curtis' New Yorkers, including General Godfrey Weitzel. The troops landed approximately 1000 yards north east of the North East Bastion (figure 7) at about 1400 in moderate surf. Weitzel was one of the first ashore, most wading through knee deep surf on a cold Christmas Day. The landings continued for two hours after which 2500 soldiers (Annex B) set up the lodgment and rear defense with skirmishers across the beach.³⁸ The most difficult phase of a joint amphibious operation was complete with the beachhead established. Weitzel's landing and movement down the beach to the land face appeared to be proceeding as anticipated with no surprises. Naval gunfire had cut the wires that led from the fort to the torpedoes buried in the sand. This allowed unimpeded movement of the landing force from the landing zone to the palisades.

Porter, now gaining confidence that the naval gunfire was achieving objectives as planned, began to investigate the possibilities of sounding New Inlet again. This required a near suicidal attempt by a contingent of boats to sound the channel and mark with buoys under direct fire at close range from elevated coastal defense guns. The daring Lt. Cmdr. Cushing volunteered to lead the contingent. He had previously sounded the inlet and was

generally aware of the shoals and sand bars, but needed to verify current positions in the channel.³⁹

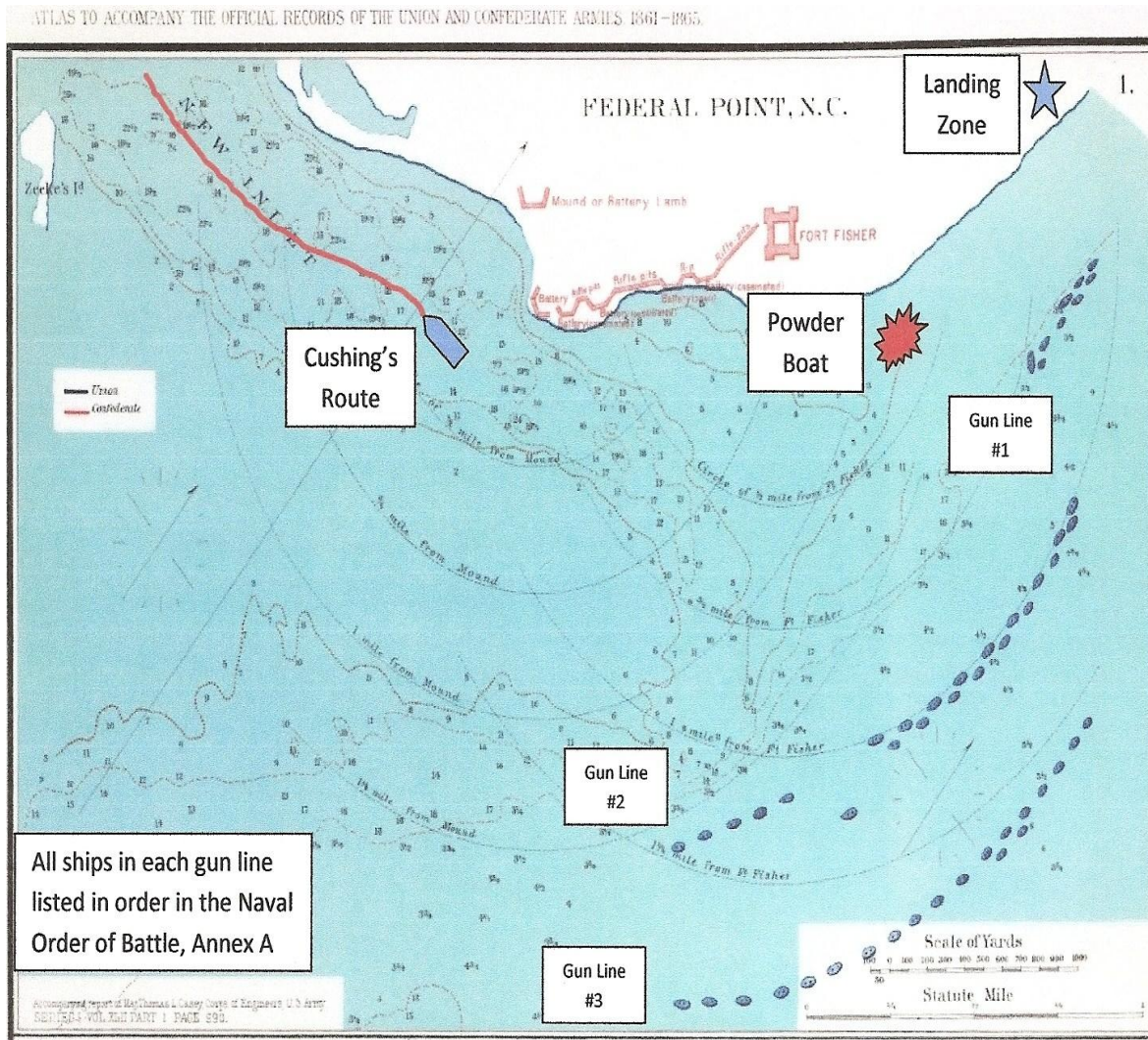


Figure 7. Naval Force Disposition of the First Assault
 Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXVII.

Cushing's group of ten small boats proceeded up the inlet for sounding duties under cover of the cannon smoke. Confederate Capt. William Brooks was in charge of Battery

Buchanan (figure 4) and already had authority to fire at will against approaching enemy vessels in the channel. The boats remained concealed under cannonade smoke until they started up the channel. The moment was fleeting because once the battery identified the approaching boats, they fired without constraint. Once clear of the smoke they quickly drew fire from Mound Battery (figure 8). The poor accuracy of the Confederate guns, however, allowed Cushing's contingent to hastily conduct the soundings. This operation inadvertently revealed the tactical advantage moving small boats had against fixed guns in fortified positions. The guns had a limited depression angle to effect fire on the small boats. The battery was unable to sustain the high rate of fire, because shortly before Cushing's departure both of the Brook Rifles burst killing several members of the gun crews. The sounding crew suffered as well, with one of the boats suffering a direct hit killing one and wounding the remainder of the crew. The mission was completed and the channel marked, but Porter decided against sending even shallow draft vessels up the channel. Despite the tactical advantage, that converging fields of fire provided against the fort's rear, he assessed the risk too great.⁴⁰

Porter's naval gunfire had driven the Confederates into the shelter of bomb proofs which allowed Weitzel's forces to spread out across the beach.⁴¹ The far right on the north end of landing zone was engaging Brigadier General William W. Kirkland's skirmishers and driving them back up to Battery Anderson (figure 2), securing the flank. Colonel Curtis directed Colonel Rufus Daggett to secure Wilmington Road by establishing blocking positions along the rear flank and in the process captured a contingent of Confederate Junior Volunteers, consisting of approximately 200 troops. Simultaneously, Second Lieutenant George Simpson cut telegraph lines to Wilmington which degraded Lamb's

ability to call for timely reinforcements. At Shepherds Battery on the land face (figure 4), Union forces under second Lieutenant William Walling had overrun the battery and Walling personally captured the Confederate colors. It appeared to Curtis that his assaulting forces might take the fort with a little audacity. Walling's capture of the colors increased Curtis's optimism. The fort's west end appeared deserted and might be breached allowing access to the interior. Second Lieutenant George Ross, Weitzel's aide, also attempted to alleviate his general's concerns over another failure as at Charleston's Battery Wagner. Weitzel remained skeptical and proceeded down the beach to gain a close view of the fort palisades and batteries. He managed to get within a few hundred yards of the sea face and assessed no significant damage to the defenses or the guns. He conducted a survey from the pulpit on the sea face around to the main sally port on the land side (figure 4). He then returned to the beach to relay his assessment to Butler and recommendation that to take the fort required a prolonged siege.⁴²

Weitzel's assessment reached Butler who now felt the pressure of the assault on his shoulders, and dispatched Comstock to survey the fortress with Weitzel. Butler was aware of the repercussions a failure brought still contemplated cancelling the operation. It was a stretch to interpret Grant's orders as liberally as he did, but if Grant's engineer supported the assessment it might justify a cancellation--with no evidence other than Weitzel's assessment of the fort defenses, Butler held off for Comstock's report. As the second survey of the fortress began the initial report of the penetration at Shepherd's Battery arrived at the landing zone with Curtis's request for reinforcements. Butler's previous reservations about the assault after the *Louisiana* only increased as reports came in of the fort's condition after two days of prolonged naval gunfire and reports that Confederate

General Robert F. Hoke's Division was enroute to reinforce the fort. The operation now began to unravel.⁴³

Curtis expressed disbelief about the order to withdraw, which essentially cancelled the assault. He surmised the only reason for the retreat was misinformation about the fort and sent a dispatch to Butler advising him of the situation at Shepherd's Battery. Curtis elaborated on the cutting of the telegraph lines, the capture of a Confederate request for artillery support from Sugar Loaf, and Walling's daring exploit into the battery and return with the colors. As the dispatch left, General Adelbert Ames, one of Butler's corps commanders arrived on the beach to assist in coordinating retrograde operations. Curtis provided a situation report to Ames and Comstock and then requested permission to return to his troops with reinforcements. Ames agreed.⁴⁴

Comstock accompanied Curtis back to Shepherd's Battery to assess the situation. Comstock's experience prevailed as he realized realizing that a single brigade had insufficient combat power to effectively sustain the assault. He surmised the defenders were below in bomb proofs and when the naval gunfire stopped, the walls would fill with sharpshooters. It was near dark when Comstock departed to the beach with hopes of getting more troops and an authorization to continue the assault. Unfortunately, when the naval guns fell silent, as Comstock predicted, the walls filled with Confederates. Comstock now estimated the siege required a force of several thousand troops and retreat, was in his estimation, the correct choice.⁴⁵

The Aftermath of the First Assault

In the aftermath of the decision to call off the assault, a new problem developed at the landing zone that further complicating the already troubled operations. In the confusion

of the landings and constant naval gunnery, Brigadier General Charles K. Graham reported a storm moving in. Graham, a midshipman during the Mexican War, was now in charge of the landing area and recognized that the troops needed to be supplied or removed. The surf was rising rapidly enough that soon it would inhibit safe boat operations and potentially strand any troops not evacuated. Weitzel and Comstock returned with no change in their assessment of the fortress defenses, which was enough for Butler. He dispatched orders to begin retrograde operations from the landing zone immediately. The removal of troops started just after dark and continued until around 2300 when the surf effectively stopped all small boat operations. This stranded Curtis and his men between the fort and Hoke's inbound reinforcements.⁴⁶

As the last launch departed, Curtis and his scant 700 troops were stuck on hostile shores with no rations, blankets, ammunitions, or entrenching tools. Then the weather turned even worse and it began to sleet. The troops dug in with their hands, rifle butts, and broken oars; knowing it was going to be a long night. As if things could not get any worse, the weather prohibited boat operations for another day. Porter's fleet was unable to rescue Curtis's troops until the morning of 27 December after almost 48 hours on the hostile beach. Curtis then learned that Butler had departed the day before for Hampton Roads.⁴⁷

The weather delay gave Porter time to draft a scathing report about Butler's incompetence. He detailed the conflict and problems throughout the expedition including the desertion of 700 troops unsupplied on the beach for over 48 hours. Porter directed subordinate commanders to provide detailed after action reports to him for consolidation to preempt claims about the Navy's culpability in the failed assault on Fort Fisher. He submitted the reports to Welles, Fox, and Stanton.⁴⁸

Porter specifically requested that Grant support a second assault on Fort Fisher, but under a capable commander with the tenacity to finish the fight—meaning someone other than Butler. Porter learned a significant amount about joint seaborne assaults and how they proved more challenging than riverine assaults. Porter's fleet had fired approximately 20,000 rounds in suppressing the fort's defenses and preparing the landing zone. The armada expended an approximate net weight of 1,270,000 pounds of explosive ordnance. The Confederates only responded with approximately 1,400 rounds over the two days. This decisively demonstrated the fleet's ability to suppress shore batteries—at least for the critical lodgment on the beach. Despite the staggering amount of ordnance expended, the casualties on both sides were low. Confederate losses numbered 61 and the Union losses at 12, most attributed to exploding parrot guns on both sides.⁴⁹

Conclusion

The Navy originally conceived a joint operation, but the Fort Fisher expedition fell short due to several factors. The first and arguably the most detrimental was the lack of a unified commander who exercised complete authority over the expedition from start to finish. That problem only complicated and worked against the efficiency of the entire operation. The result was a parallel command structure that worked together ad-hoc. The personal relationship between the commanders compounded an already flawed command and control structure. Adversarial personalities drove competing objectives and fostered a lack of respect. Several events contributed to failure of the first assault on Fort Fisher and some attributed to the personality conflict between Porter and Butler. This did not remove the responsibility from Butler in exercising control over the operation as the senior ranking officer. Butler commanded much in the same style as his friend McClellan; formulating

the plans, but not disseminating the details. This inhibited the subordinate commanders' ability to execute their part independently or when communications broke down, as they inevitably did in the heat of combat. Butler contributed to the caustic relationship with the officers and especially Porter with his suspicion of his subordinates and peers, in addition to his handling of official orders. This resulted in considerable confusion between the commanders with respect to when and where they were to rendezvous.⁵⁰

Butler's complete lack of understanding of naval element capabilities, specifically endurance, speed, logistic requirements, and susceptibility to weather, compounded the command and control problem. Porter and Butler share the preponderance of blame for failure during the first assault on Fort Fisher due to their personality conflict, but the blame was not exclusive. Grant exercised questionable judgment as well in his selection of the commanders. Grant might have mitigated the problem if he had spelled out the overall commander and his responsibilities for the expedition to the commanders during coordination. Then Grant unknowingly exacerbated the problems by sending all orders through Butler as the department commander for North Carolina. This allowed Butler to restrict the overall concept of operations by controlling the information disseminated to subordinate commanders.⁵¹

The operation *was* technically joint, but in execution, it was not. Civil War armies and navies did not operate under the construct of doctrine. They used drill manuals, General Orders, and Captain's fighting instructions or battle orders in the navy. This delegated the coordination above the unit levels to the senior commander in the field and did not consider of the formal or informal authority over the supporting commanders. This made coordination often a convenience not a necessity. The designated commanders

(Weitzel or Porter) did not receive full disclosure of Grant's commander's intent from Butler. The operation clearly did not define phases and transitions. Objectives were not clearly identified and there was no indication of contingency planning, by either commander, to identify branches or sequels as required. Clearly, the Union learned a considerable amount after the battle. The consolidation of the after action reports of the battle proved to be instrumental in the second assault. But would those lessons learned be enough for success in a second assault?

CHAPTER 5

THE LAST STAND AT FORT FISHER

Fallout and Repercussions

The first assault failed to achieve the objective, but it provided a plethora of good practices and lessons for the next attempt. The reports of the expedition's failure arrived within a day of General Butler's cancellation of the assault. After Lieutenant General Ulysses Grant received notification that the Fort Fisher expedition had failed, he dispatched a telegram to the President. His initial report simply stated that the operation had totally failed and that he hoped to determine who was to blame. President Lincoln and his cabinet were disappointed with the results but allowed Grant to sort out what happened before deciding on the next step.⁵²

Grant read through Admiral Porter's after action report and waited for receipt of General Butler's report. Grant initially arrived at the conclusion that the operation started three days late when the enemy was disadvantaged with a sizable portion of troops deployed away from Fort Fisher. He concluded Butler achieved the landing and that the ships suppressed the fort. The powder boat, on the other hand, provided nothing more than a brilliant explosion and it appeared that Butler prematurely cancelled the operation after the landing. Although Porter's fleet failed to damage the fort as significantly as hoped, it had suppressed the enemy and allowed the landing. It seemed to Grant that Porter anticipated a second attempt at the fort and remained on station to prevent the fort from repairing the damage done during the first assault.⁵³

On the morning of 27 December, Lincoln noted, as he read a Richmond newspaper, that a Union Gunboat had grounded and was blown up. Lincoln (rightly) believed this to

be the *Louisiana* experiment. To compound the sting of failure, the published plan of attack appeared in the paper as well. The news only grew worse, the next day Grant accompanied the cabinet to meet with the President with Porter's after action report. Even without Butler's report, the expedition clearly did not achieve the objective. Even Porter stated, "The expedition's failure was half a victory." Lincoln read the reports and, as was his custom at this point in the war, deferred questions and requests for military planning to Grant.⁵⁴

Grant, however, seemed inclined to attempt a second assault on Fort Fisher. General Sherman's victory in Savannah and his need for a resupply point probably contributed to this decision. Either way the wheels were in motion for a second attempt. Grant and Secretary of War Stanton studied the results. They concluded that both Porter and Butler shared fault in the failure. Butler's clear deviation from Grant's orders after effecting the landing sealed his fate. Grant and Stanton then approached Secretary of the Navy Welles about Porter. Welles conceded that Porter had his faults, but remained the best choice for the assignment, especially if a second expedition was to be attempted.⁵⁵

Grant informed Butler on 7 January that he was being replaced as Department Commander. President Lincoln telegraphed Butler to submit his after action report because as yet no report had arrived. Lincoln also disapproved Butler's leave and restricted him from publishing any details of this event until Grant reviewed the report. On the 13 January, Lincoln sent a telegram to Butler acknowledging receipt of the report, but then directed him to appear before Congress to testify before the Joint Committee on the Conduct of the War. By the time the Joint Committee convened, the second attempt was underway and had arrived off Cape Fear.⁵⁶

The second plan emerged out of recommendations from both Porter and the brigade commanders who participated in the first assault and from the original concept of operations. Porter's new joint partner in the expedition was Brevet Major General Alfred Terry. Although he was one of Butler's staff officers, which initially worried Porter, the Admiral quickly changed his mind after meeting Terry. The two quickly developed a solid working relationship. Stanton and Grant, in concert with Welles and Fox, were adamant that the previous working relationship exhibited by Butler and Porter not be replicated. They must defer to each other in their respective areas of expertise.⁵⁷ This high level of interest was mostly due to Lincoln, who personally directed Welles to ensure proper interservice cooperation.⁵⁸ Grant delivered Terry his orders for the operation and informed him not to open them prior to sailing.

On the evening of 4 January, Grant accompanied Terry and Lieutenant Colonel Comstock from Bermuda Hundred to Hampton Roads. During the transit, he disclosed to Terry the objective along with new additional detailed guidance for the conduct of the expedition. Grant informed Terry that secrecy was of the utmost importance and that details of the operation were intentionally vague. Terry and Porter needed to work collaboratively once in position. Terry brought roughly the same number of troops as Butler had (Annex D), including a siege train if required. Stanton, Welles, and Grant briefed Lincoln on the plan and the measures undertaken to ensure secrecy of the operation. Terry and his troops sailed on the morning of 6 January at 0400.⁵⁹

The expedition started on time, but it also began with internal strife among the army commanders. Brigadier General Ames and Brevet Brigadier General Curtis both arrived at Cape Fear resentful of each other. Ames missed the ships movement that morning when

the flotilla of army transports sailed. Curtis believed that Ames had retired to his quarters, but Ames had not and subsequently the ship sailed without him. It took two long days for Ames to catch up to the force. After joining the force, he transferred to the *Atlantic* and accused Curtis of deliberately leaving him behind. The conflict between them grew more strained throughout the transit. Finally, the friction between them boiled over and Ames ordered Curtis refrain from interacting with him except for official business. Curtis readily agreed to the conditions.⁶⁰

On the Confederate side, Major General Whiting and Colonel Lamb began to recover from the first assault. They assessed what they needed to defeat another assault and planned accordingly. Both believed that the successful outcome was due in large part to luck. Whiting dispatched a letter to Secretary of War James Seddon on 1 January 1865 specifically outlining the inevitability of another attempt on Fort Fisher. Given the considerable amount of preparation and money invested in the first assault, it was unlikely that the Union would not try a second attempt.⁶¹ The letter went on to discuss the specific points that Whiting believed needed to be resolved before the Union made another attempt. First, although the fort presented a formidable obstacle to a naval assault; it proved vulnerable to a siege from the shore. Secondly, the Union had deployed a detachment into the inlet and conducted soundings. This raised the possibility of running a shallow draft ironclad behind the defenses. Consequently, Whiting recommended expanding the number of obstructions to the channel. Additionally, the ironclads *Raleigh* and *North Carolina* had not performed satisfactorily. Fifth, the garrison of troops needed reinforcement to at least 1,200 and 2,000 if possible. Finally, Whiting concluded with the assessment that the Cape Fear inlets proved insufficiently defended and it was very likely a second attempt would

come--with a larger force and greater resolve. This might make holding the fort and inlet defenses untenable.⁶²

Seddon forwarded the recommendations to President Jefferson Davis with his endorsement. Davis reviewed the recommendations along with the after action report of the December assault on Fort Fisher and agreed with the findings. He forwarded it back to Seddon with his endorsement and directed its referral to the departmental commander for implementation. That commander was still General Bragg who was, to say the least, unsympathetic to Whiting's numerous and repeated requests, despite the fact that the recommendations were sound and supported by the chain of command. Davis's endorsement slowly migrated through the Confederate bureaucracy and finally arrived for dispatch as an order on 20 January--five days after Fort Fisher had fallen.⁶³

Bragg had already withdrawn Major General Hoke's troops back from Sugar Loaf into encampment north of Wilmington (figure 8). This reduced Lamb's forces to a paltry 800 troops to man, maintain, and defend the fortification against Union forces. Lamb also dispatched a request to Bragg directly, outlining specific requirements for additional forces and equipment that were required to defend the Cape Fear Inlet. He requested water torpedoes to prevent Union gunboats from entering the inlet and exploiting the fortification's weak rear defenses. Additionally Lamb wanted torpedoes moored in the area the Union monitors anchored at during the December assault. Lastly, he requested a large quantity of anti-personnel mines to enhance the minefield in front of the land face.⁶⁴ Lamb's requests did not elicit a significant response from Bragg. This may be due to the majority of Bragg's attention remaining focused on the construction of a Confederate

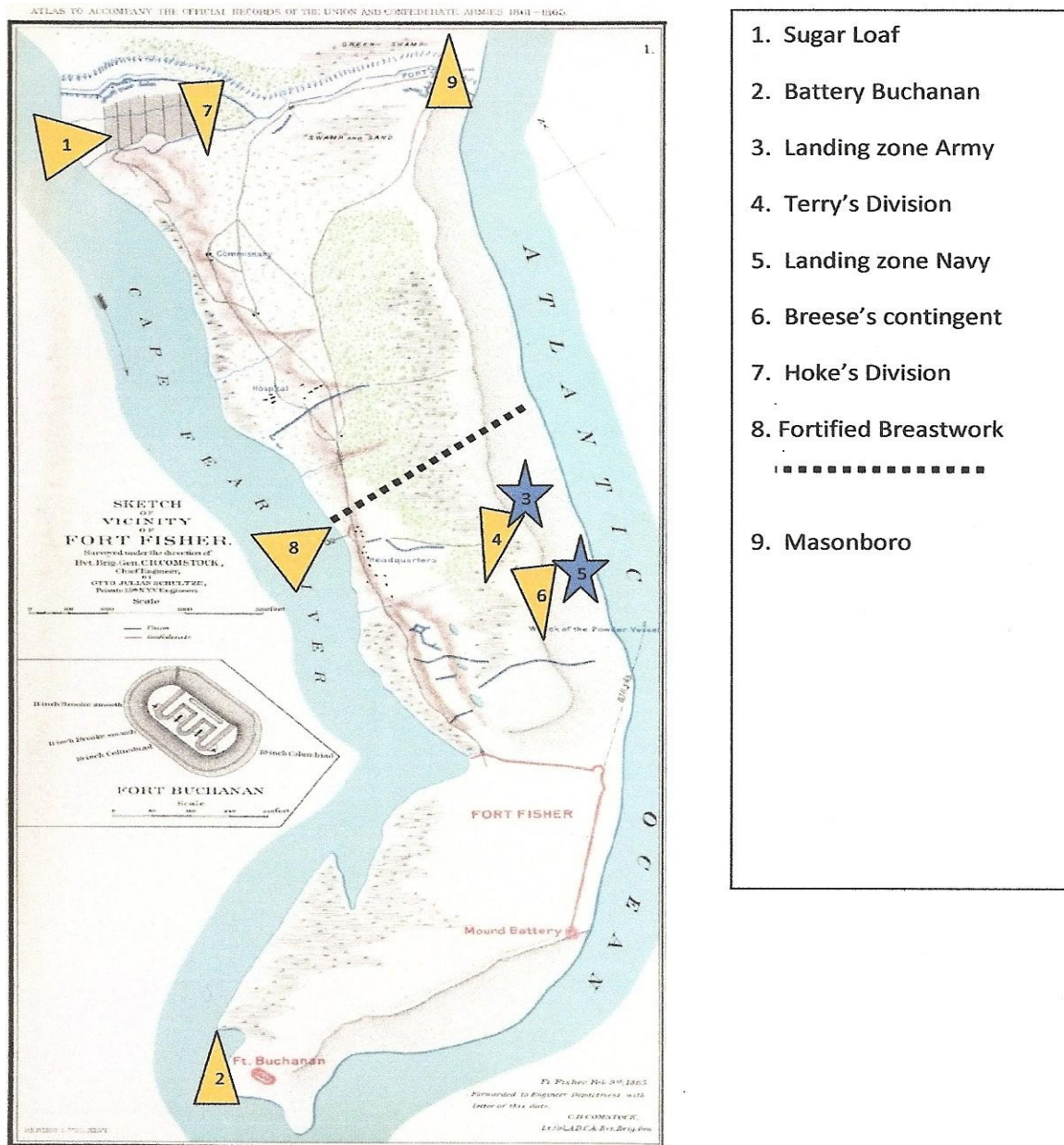


Figure 8. Naval Force Landing Zones of the Second Assault

Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXXV.

Bragg was under pressure to support Wilmington's efforts to enhance its defenses from Confederate Secretary of the Navy Stephen Mallory. During several exchanges with Bragg, Mallory had coerced him into dedicating substantial efforts to get the gunboat completed. Zebulon Vance Governor of North Carolina hoped that the gunboat might fill the gap in defenses for Wilmington. This diversion of effort and competing priorities contributed to Fort Fisher's lack of preparation for the second assault. Although, Bragg did receive warning on 9 January from Richmond that General Terry and a large contingent planned to sail for Wilmington, he remained preoccupied with these other matters. He evidently had a great deal of confidence in the fort's ability to resist another Union assault. The previous lucky victory also contributed to this false sense of security.⁶⁵

Nearly two weeks had transpired since Lamb request for supplies and reinforcements from Bragg. Reports started trickling in that pickets north of Masonboro, North Carolina sighted a large fleet steaming south. Lamb suspected what the fleet was and where it was heading. By 2200 on the 12 January, Colonel T. J. Lipscom, the commander of the defenses at Masonboro confirmed at least 30 ships were steaming toward the fort. Fortunately, Lipscom also reported the fleet to Whiting and Bragg, which shocked Bragg from his complacency about the fort's security. Whiting and Bragg discussed the options available. Bragg suggested Whiting assume command of the fort, but Whiting declined, agreeing instead to go as an advisor to Lamb. The only other action came when Bragg redeployed Hoke's division back to Sugar Loaf. The guidance passed down to the troops was to hold the fort at all costs.⁶⁶

Déjà vu--The Second Attempt

Porter's armada of 58 ships arrived throughout the night and immediately assembled into gun lines (figure 9). Lamb observed the Union fleet with trepidation, pondering the chances of another successful repulse. Like clockwork, Porter's fleet opened fire at 0730 on 13 January with a deafening cannonade that signaled to Wilmington that the Federals had returned. The first difference in the assault that Lamb observed was that it took station closer to the shore than in December. Believing that he might disable some of the fleet, Lamb directed his batteries return fire. This proved to be a tactical error because the Union gunners had not registered their guns yet; now the Confederate muzzle flashes provided clear targets. Within a few hours, the fleet again silenced the fortification's main guns with overwhelming cannon fire from the sea.⁶⁷

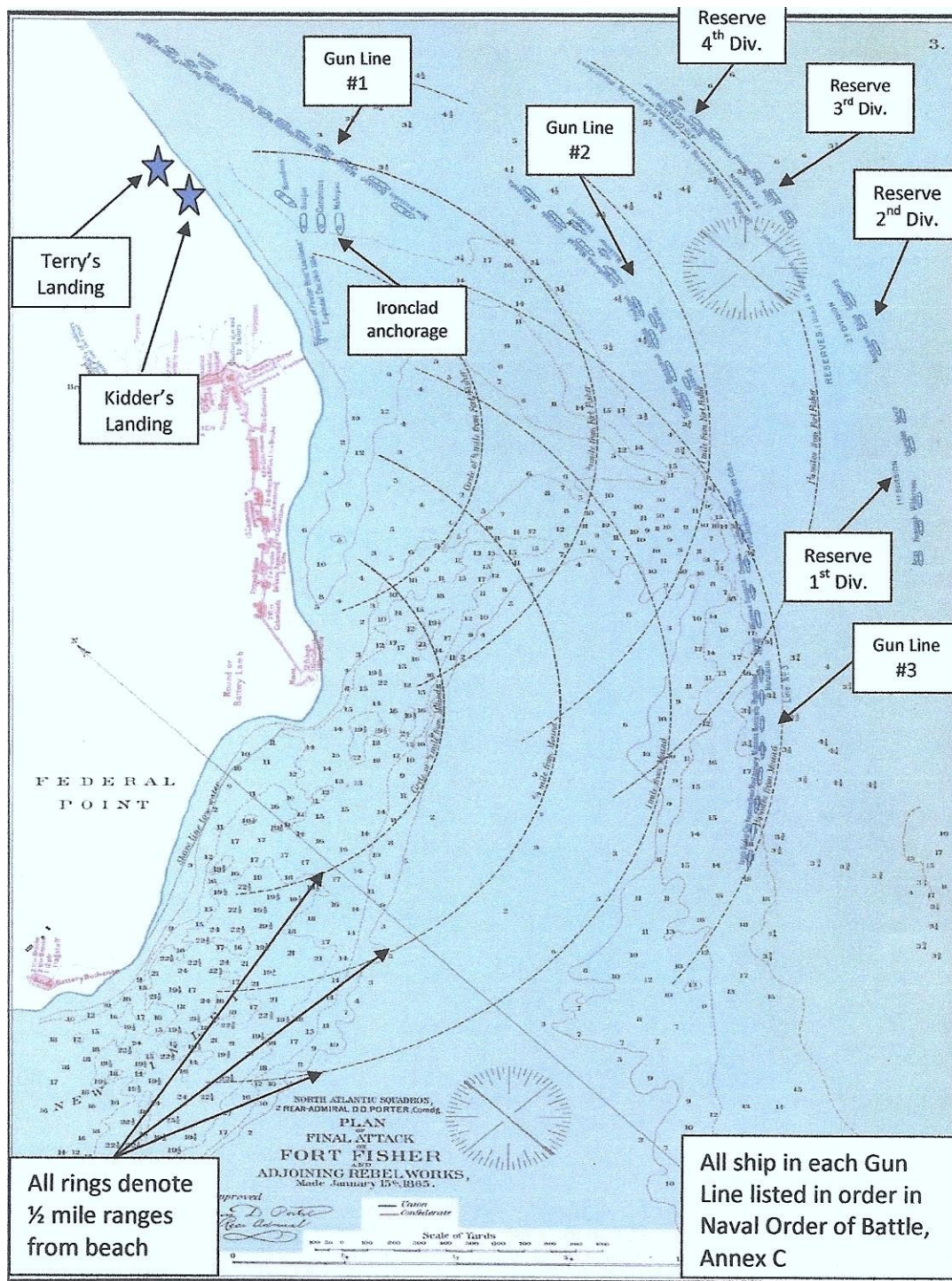


Figure 9. Naval Force Disposition of the Second Assault

Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXXV.

The reserve lines moved in to commenced area fire on the landing zone and the adjacent woods in preparation for the landing. The second assault plan moved the landing zone further north by a mile to minimize the effect of Confederate counter battery fire (figure 8). This placed the landing zone near a wooded area that stretched across the peninsula and which provided cover for Confederate pickets. The constant shelling of the woods failed to break the defenders' spirits, instead solidifying their resolve. A number of Confederates braved the shelling in the woods and on the parapets and opposed the landing. The accuracy of the Confederate sharpshooters made the landing zone hazardous for the first few hours.⁶⁸

Despite Porter's best efforts to suppress the enemy cannon fire at the landing party, the Fort Fisher garrison managed to shell the landing area. Terry's troops landed on the beach aboard 200 boats at 0800 on the 13 January. The plan was to land the troops in the soft shallow sand, but the heavy surf capsized several of the boats and complicated the landing. Most of the soldiers and sailors in the first wave washed ashore in the cold Atlantic waters. As the landing progressed, the naval gunfire subsided to minimize fratricide.⁶⁹

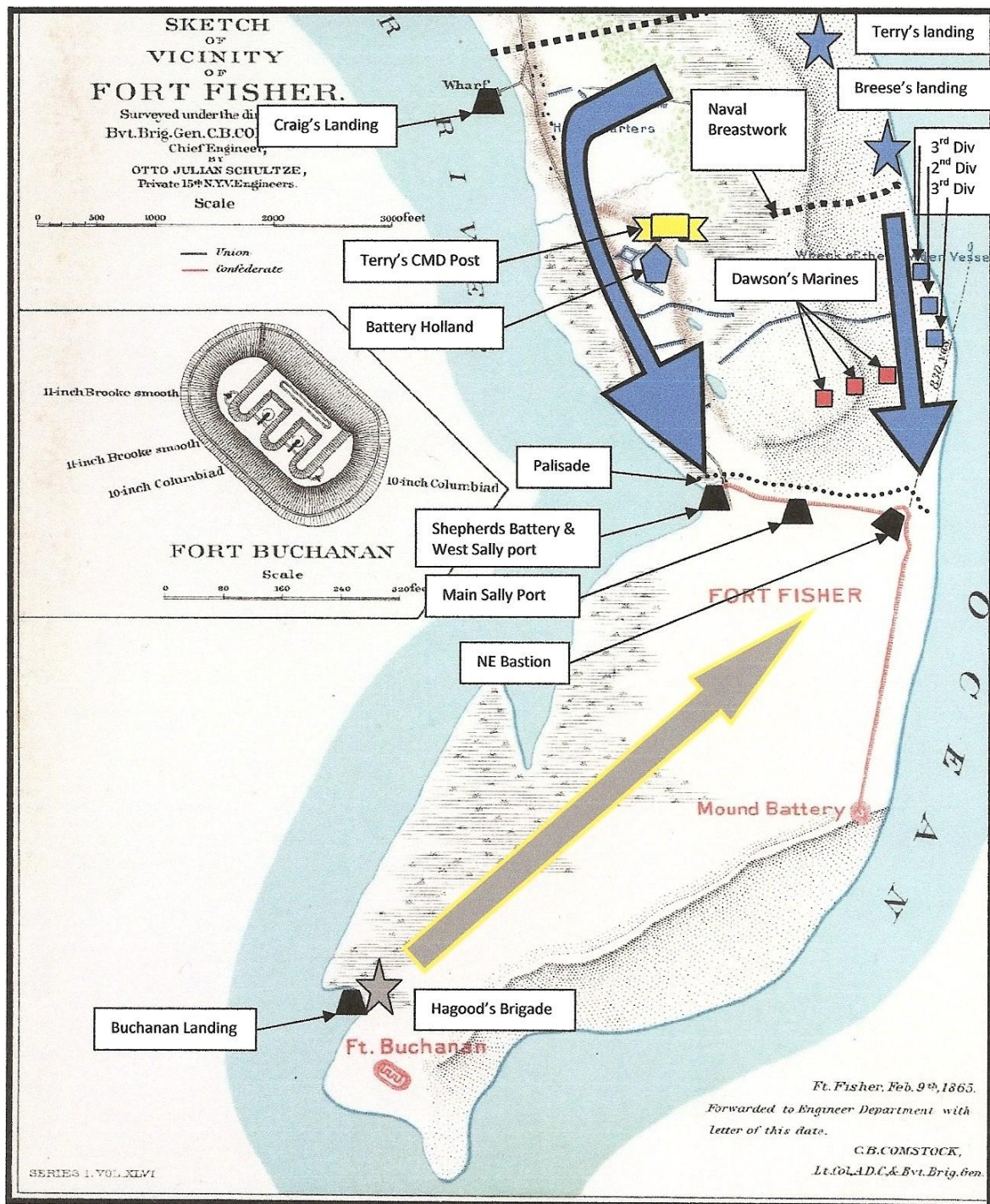


Figure 10. Troop Movements and Key Features of the Second Assault
Source: George B. Davis, Leslie J. Perry, and Joseph W. Kirkley, *The Official Military Atlas of the Civil War* (New York, NY: Barnes and Noble Publishing, 2003), Plate LXXV.

The first wave that arrived on the beach was Colonel Louis Bell and his 3rd brigade, followed by parts of the XXIV Corps. Once ashore in sufficient numbers, Bell organized skirmishers and pushed them into the woods to flush out any remaining Confederates. After Bell deployed the troops, he directed the establishment of a rear defense to secure the lodgment (figure 10). General Terry arrived on the peninsula shortly after Bell and then assumed command. When General Ames arrived, Terry directed him to complete the lodgment. Terry directed General Paine to have his 2nd and 3rd Brigades man the rear defenses and establish a blocking position across the peninsula to prevent Bragg from striking their rear flank. The Union forces achieved a hastily established lodgment and blocking positions by 0900.⁷⁰

The next two brigades that landed were the 1st and the 2nd from Ames Division and Terry moved them to assist Paine's troops in fortifying the line and the lodgment. Along with the troops, sufficient supplies and equipment arrived to sustain Terry's troops for twelve days. The extra supplies were a lesson learned from the first assault and a contingency if the weather forced a disruption in the resupply. It became evident to several of the December veterans that Terry came to stay as opposed to the previous attempt with General Butler. It took six hours to land 8,000 troops, equipment, supplies, and establish a solid breastwork that spanned the entire peninsula (figure 10). Before dinner, skirmishers returned with fresh beef from loose cattle discovered in the woods. By late afternoon Officers on *Malvern* considered the landing and their part in the joint assault successful as numerous campfires appeared throughout the lodgment.⁷¹

Terry previously decided to hold off landing the siege equipment until the following morning to minimize the time required to land the troops. He and Comstock moved down

the beach to reconnoiter the fortress and assess the damage inflicted by the fleet. As they moved down the peninsula, the Confederate ironclad *Chickamauga* moved up behind the fort and commenced shelling the lodgment. Fortunately, Porter and his ships responded quickly, overwhelmed it with naval gunfire, and forced it to retreat to Wilmington. Then Terry and Comstock reconnoitered the fort and returned to Terry's command post. Terry discussed with his subordinates this intention to launch the assault on 15 January. He decided that he would go out to Porter's flagship to go over his part of the plan with Porter to avoid confusion.⁷²

Porter agreed with the decision to launch the assault on 15 January. He had previously recommended that Terry establish a defensible lodgment before starting an assault if possible, based on the situation described by Curtis during the first assault. It was at this time that Porter decided to commit a contingent of sailors and marines to an assault on the sea face of the fort. Although Porter's men lacked training for siege operations, he believed that suppression of the defenders was possible with naval gunfire. This required the signal for the land assault to come from Porter after his naval contingent had firmly established itself ashore. Terry agreed and the two settled on a collective blast from the ships' steam whistles at 1530 on 15 January. With the details for the assault of the fortress solidified, the plan was set and Terry returned to the beach.⁷³

Hoke's Division, previously dispatched from Wilmington to Sugar Loaf arrived in the early hours of 13 January, approximately 4.5 miles north of Fort Fisher (figure 8). Hoke's Division was specifically tasked to establish a blocking position, in the event the assault on Fort Fisher was a feint to cover an overland campaign to seize Wilmington. General Whiting arrived at the Buchanan Wharf to assist Lamb in defense of the fort.

Simultaneously Hoke dispatched 700 troops of assorted infantry and artillerymen to assist the garrison in defense of the fort. The size of Lamb's garrison now swelled to over 1500 troops.⁷⁴

Rain of Steel--The Naval Assault

Porter had previously disseminated his intentions to each of the ships as they arrived on station. He assigned each ship a specific battery to concentrate on based on their gun line assignment. He restricted use of parrot guns to only when necessary and then only with half powder charges (due to the high number that had exploded in the first assault). Porter dispatched updates to each commander based on his meeting with Terry. These outlined the updated plan, the transition points between each phase, and the signals required. Porter's fleet maneuvered to station and at 0720 on 13 January, and the first shots fired came from *Brooklyn*. The barrage continued through 14 January to destroy all of the batteries capable of repulsing the assault.⁷⁵

Porter's gunfire constantly pounded the fort until the land assault was ready to commence on 15 January. Two days of relentless shelling had a demoralizing effect on the Confederates, noted by Lamb in his account of the assaults after the war. The shelling prevented preparation of food, made sleep impossible, and incurred more casualties when the defenders attempted to retrieve wounded or bury the dead. All but four of the forts guns were disabled. Porter completely wrecked the effort of two years of fortification in 48 hours with coordinated precision naval gunfire.⁷⁶

The sailors and marines (Annex E) prepared for their assault in the time between the completion of landing of Terry's troops and the commencement of the naval assault on the North East Bastion. Many wrote letters, arranged affairs, and most pulled out their best

uniforms to wear into battle. Lieutenant John Bartlett, one of the officers from the *Susquehanna* wrote his sisters about how beautiful the sunset was with the shells illuminating the dusk sky on the evening before the assault. Of the approximately 1,600 sailors and 350 marines of the all volunteer force, only the executive officer of the *Colorado*, Lieutenant George Dewey (later Admiral Dewey), was restricted from participation in the assault. His commanding officer, Commodore Henry Thatcher, denied his request to participate in the naval assault. Thatcher was designated to assume overall command of the assault if Porter became incapacitated, leaving Dewey to command *Colorado*.⁷⁷

The Confederate command and control may have contributed to the confusion over reinforcing Fort Fisher. General Bragg was the department commander for North Carolina. His subordinates were General Whiting, in command of the defenses of Wilmington, and General Hoke, Bragg's principle maneuver force for the department. Colonel Lamb commanded the fort and garrison at the end of Federal Point, Fort Fisher. The direct flow of information from Lamb went to Whiting and then to Bragg. Bragg used Hoke's division to protect Wilmington from an overland assault.⁷⁸

On 14 January, General Whiting wired Bragg and inquired why he had not opposed the landing that had proceeded throughout the day. Whiting sent his assessment of the situation to Bragg:

The game of the enemy is very plain to me--I have received dispatched from you stating the enemy has extended its lines from the coast across the peninsula. This they should have never been allowed to do; and if they are permitted to remain there, the reduction of Fort Fisher is but a question of time. This has been relayed on several times to you and the Department. I will hold the fortress to the last man, but if the Union forces are not expelled, from their present position, I cannot hold out indefinitely and the security of the harbor is also in jeopardy.⁷⁹

Bragg directed General Hoke to probe the Union forces at the landing. Hoke reported to Bragg that based on the resistance he met, the number of troops was not enough to both expel the Union forces and defend the land route to Wilmington. Bragg agreed with Hoke's assessment of the situation and decided sending more troops to augment the garrison as the better choice. Bragg directed Hoke to dispatch one more brigade to Fort Fisher. Hoke dispatched Hagood's brigade to Battery Buchanan on the morning of the 15th.⁸⁰

Three Hundred and Thirty Five Minutes--The Land Assault

On the evening of 14 January, Generals Terry, Ames, and Colonel Comstock surveyed the fort and assessed the damage. They decided that conditions favored the planned assault. The survey revealed that most of the land face guns as either unserviceable or destroyed. Terry and Ames decided to proceed with the scheduled assault on 15 January, after Porter's gunnery had suppressed any remnants of resistance in the fort.⁸¹

Hagood's brigade arrived at the Battery Buchanan landing just before dawn on 15 January (figure 10). The brigade was composed of 11th and 25th South Carolina regiments. Hagood's men knew they needed to march up to the fort from the landing. As quickly as they stepped ashore and organized to begin the march, the naval gunnery resumed. Hagood's men realized that the road north to the fort would now be a gauntlet of death, nearly two miles long. The gunnery increased to its most intense level and suppressed most movement inside the fortress, which allowed General Terry to position his forces unimpeded. Of the 1,000 men of Hagood's brigade that landed only a scant 350 survived

unscathed during the 30-minute march under fire to the fortress walls. Now Lamb's garrison stood at nearly 1,900 troops.⁸²

The destruction of most guns on the land face enabled General Terry to relocate his command post 500 yards north of the main sally port which greatly improved tactical coordination (figure 10). Terry envisioned his assault coming from four elements. The first element came from General Paine's division, comprised of Col J. W. Ames' and Col. E. Wright's brigades (colored), who composed the rear guard and blocking positions. The second element consisted of two brigades of General Ames division, Colonel Bell who would seize Craig's landing, and Colonel Pennypacker, who made up the reserve. The third element was General Curtis's brigade, which constituted the main effort of the land assault along with Colonel J. Abbott's brigade at Sheppard's Battery. The final element came from the sea under Lieutenant Commander Kidder R. Breese and the naval detachment that planned to assault the North East bastion. Cover fire for the land assault on the walls came from 13th Indiana regiment from Colonel Bell's Brigade.⁸³

Porter designated Lieutenant Commander Breese, his Chief of Staff, to lead the assault. He participated in the conception of the plan and believed it had a reasonable chance of success. Breese had transferred from the Gulf Blockading Squadron with Porter, where he had earned the Admiral's confidence. The plan rested on a contingent of approximately 2,000 sailors and marines divided into three divisions. It required them to attack the North East Bastion with a three-axis attack, under cover of both the naval guns and marine covering fire. The contingent came from 37 ships, a truly ad-hoc assault force.⁸⁴ The four division commanders assigned to Breese came from the ships, most being executive officers. The division commanders were as follows: Lieutenant Commander

Charles Cushman (*Wabash*) led first division, from the, Lieutenant Commander James Parker led second division (*Minnesota*), Lieutenant Commander Thomas O. Selfridge (*Huron*) led third division, and Captain L. L. Dawson (*Colorado*) led the division of marines.⁸⁵

The plan called for the divisions to proceed down the beach parallel to the sea face, until they reached the palisades and then disburse in columns abreast, while Dawson's marines took position approximately 200 yards from the palisade. This enabled the naval element to conduct the planned three-pronged assault. Dawson's position provided ample cover for troops, during both the advance, and if required to retrograde. Breese anticipated a prolonged sea transit based on the landing conducted by Terry on 13 January, only the weather was calm and clear on 15 January. The calmer weather only complicated the timing for the naval contingent. Utilizing hundreds of gigs, surfboats, and launches, the landing began at approximately 0900, but only required four hours to complete. Under protection of Porter's naval gunfire, the naval contingent effected the landing marginally opposed.⁸⁶

Lieutenant Preston with *Malvern's* men arrived ashore first; approximately 1,800 yard north of the North East Bastion near Terry's landing (figure 10). They maneuvered down the beach as planned and established a breastwork approximately 1,000 yards from the palisades with coal shovels. Dawson's marines proceeded down the beach and moved to position, advancing slowly until approximately 150 yards from the palisade.

Unfortunately, this was the most tactical aspect of the assault. Neither, the sailors or marines really understood the plan, and none had received training required to execute a

ground assault. Each ship dispatched troops ashore under their own officers, unaware that Breese commanded the ground assault.⁸⁷

Lieutenant Commander Parker landed shortly after Preston and took charge of the landing area. As the senior officer scheduled to land on the beach, he assumed he was in command. He quickly directed the troops to assemble under the officers that arrived with them. Parker then moved to each commander and explained the concept of operations and their responsibilities. Approximately a half hour later, Lieutenant Commander Breese arrived ashore. Presented the order from Porter, signifying him as overall commander, he then relieved Parker. Although Parker was annoyed with the arrangements, he did not fault Breese for the confusion. The landing proceeded as planned, and although it appeared logical, it remained fatally flawed. The sailors and marines lacked the requisite skills to maneuver in formation under fire. This was a skill developed through drill over time and most of Breese's men were executing these formations for the first time on the beach and under fire.⁸⁸

Unknown to Breese, Colonel Lamb observed the landing all morning and resigned himself that General Bragg simply would not arrive in time to thwart this assault. Even with most of his heavy guns disabled, he was determined to stop the assault at all costs. He directed the two batteries, which concentrated on the landing zone to shift to the troops preparing to assault the North East Bastion. The range and the cover provided by the fortress walls prevented the use of antipersonnel grape shot. In spite of his concerns about Bragg's unwillingness to aid in the defense of the fort, Lamb dispatched another telegram to Bragg asking for assistance and for him to join the fight.⁸⁹

General Curtis, 1st brigade commander from General Ames division and veteran of the first assault observed the sailors and marines as they assembled on the beach. He maneuvered over and provided recommendations to Lieutenant Benjamin Porter (no relation to the admiral) about potential problems he observed with the formation. Curtis stated Porter's troops assembled too close together and their front too narrow, which placed them at a considerable disadvantage. He recommended that the main contingent held back, until the advanced party established a footing for the assault to build on. To assault a fortified position that is elevated from a flat plain in this manner subjected his troops to brutal punishment and unnecessarily high casualties (figure 11). Parochial rivalry and inexperience prevented Porter from understanding Curtis's recommendations. Curtis unfortunately proved correct in his assessment of the assault and the defenders ravaged it.⁹⁰



Figure 11. View of the seawall from the beach

Source: Mark A. Moore, *North Carolina Historic Sites: Fort Fisher*, Timothy H Sullivan pictures, 1865 (26 January 2006), <http://www.nchistoricsites.org/fisher/fisher.htm> (accessed 5 November 2008),

The signal that launched the land assault was an ear piercing blast from every ships steam whistle, sounded at 1500 and initiated by *Malvern*. The whistle sounded shortly after 1500, but the majority of General Terry's forces did not start until 1525. Timing was off, because the naval contingent landed early and anxiety overwhelmed the assault force the moment the signal sounded. The land forces had a significant distance to cover from

their holding positions to the wall. The unavoidable friction of war resulted in the unsynchronized assault by army and naval elements.⁹¹

Lieutenant Commander Breese valiantly led his contingent of approximately 1,900 sailors and marines against the fortress (Annex E). His contingent primarily armed with pistols and cutlasses, typically effective arms for boarding another naval vessel; they proved virtually useless against a fortified defensive work. Immediately, the troops charged at the bastion. Cushman's 1st division the anticipated lead element of the charge, ended up abreast of Dawson's marines. Now, too late, Lieutenant Porter realized what Cutis meant with his recommendations about the formation. The barren beach was completely devoid of any cover and men rapidly fell everywhere he looked.⁹²

Lamb had exercised patience and directed his men not fire until the enemy advanced to 800 yards, which achieved the accuracy and density of fire necessary to halt the advance. Completely outmatched, the sailors and marines met accurate fire and grape shot with cutlasses and pistols. Within minutes after the charge commenced, they degenerated into a mob approximately 300 yards long. The troops fanned out, desperately searched for cover, and began tripping over exposed wires to mines the Confederates had buried. Several of the men realized what they were (buried anti-personnel torpedoes) and systematically disabled them by cutting the heavy lead wires.⁹³

Fueled by adrenalin and the rush of the charge amidst the confusion and devastating fire, a small portion reached the palisade. Admiral Dewey noted in his autobiography that from his vantage point on the *Colorado* he clearly saw the assault as ~~an~~ "murderous madness." Of the small contingent that arrived at the palisade, a portion of those discovered a breach in the palisade and attempted to charge up the bastion. The Confederates felled most of the

sailors shortly after they started, but the color bearer managed to make it halfway up the parapet before he received a fatal wound.⁹⁴

As the few survivors remained pinned down along the palisade, they surveyed the battlefield as the distant survivors retreated up the beach. The assault had completely failed in less than 45 minutes. The naval assault was clearly visible during their transit to the beach, and the Confederates anticipated the charge. This coupled with the failure of the previous attempt in December contributed to the belief by the defenders that this was the main effort. Instead, this created a serendipitous operational feint. Although it proved operationally advantageous, it came at a costly price.⁹⁵

Colonel Lamb gave the order to repel the attackers and the Confederates mercilessly repelled the Union assault and drove them back to the beach in a total rout. The Confederate defenders were jubilant over the first quick victory of an anticipated long day. Lamb now drew forces from the western palisades and defenses to prepare the sea face for what he perceived would be an inevitable re-attack. Lamb had 250 men on the NE Bastion, and Whiting recommended moving another 500 to the Pulpit, and holding another 350 men in the bomb proofs for reserve. Now out of the roughly 1,900 men for the entire fortress defense, Whiting had been unintentionally deceived into concentrating 1,000 of them at the NE Bastion, away from Curtis's main assault on the opposite side of the peninsula. Meanwhile Curtis's main effort arrived at the wall and poured over the palisades and up the walls. Lieutenant Colonel S. Zent's sharpshooters provided the necessary cover which enabled Curtis to establish a foothold and pierce the fortress defenses.⁹⁶

General Whiting and Colonel Lamb now realized what had transpired as they observed Union colors moving over Sheppard's Battery. They had been deceived into pulling the majority of the defenders away from the most vulnerable point of the fortress, the western sally port along Wilmington Road (figure 10). This tactical error on the part of Whiting and Lamb cost them dearly. The momentum the Confederates gained in repulsing the naval contingent back to the beach evaporated and the initiative now shifted to the Union.⁹⁷

Shortly after the whistles sounded the start of the land assault, Porter calculated approximately ten minutes of firing, and the naval cannon fire subsided along the land face to avoid fratricide. Curtis's and Abbott's Brigades moved from Battery Holland to the wall, Pennypacker's brigade moved south from Craig's landing and assumed position as the reserve force at Battery Holland (figure 10). This allowed Bell's brigade to maintain landing security. Curtis initiated movement of his forces on the fortress walls as planned, with a shout of, ~~forward!~~"⁹⁸ (figure 12)



Figure 12. Curtis's Charge from Harpers Weekly

Source: Son of the South, *Harpers Weekly: Civil War editions*1 (January 2003), <http://www.sonofthesouth.net/> (accessed 7 February 2009).

Both brigades assaulted the palisades and causeway leading into the western sally port, with axes hacking their way through the expanse of palisade and cheval-de-frise, at the access points, which stretched across the land face. During the initial charge by Curtis's troops, they endured murderous fire from Shepherd's Battery. Major James Reilly, a veteran of the first assault, now commanded Shepherd's Battery and raked the Union forces with deadly accuracy (figure 10).⁹⁹

Only through the sheer weight of numbers did Curtis's troops manage to push through the defenses, despite the volume of fire hurled down on them from Major Reilly's men on Shepherd's Battery. Once the breach in the fortress was achieved and they gained

the momentum, Curtis and his troops then engaged in savage hand-to-hand fighting with bayonets and point blank fire. To Curtis's credit, his New Yorkers from the 117th regiment under Colonel Francis Meyer were the first to raise Union colors over Shepherds Battery. Eventually the Union melee for the parapets made progress. Terry called up Pennypacker's reserves and maneuvered to support Curtis and Abbott. Then he split off Colonel J. Moore and his 203rd Pennsylvanians to assist in forcing through the western sally port.¹⁰⁰

Whiting and Lamb watched their desperate situation deteriorate with each passing minute as Union forces poured through the west end. Colonel Lamb quickly realized if his defenders did not stop the hemorrhage it could prove fatal to the fortress. In a desperate move to stem the tide of the Union advance, Whiting directed two of the batteries at Battery Buchanan to turn their guns on the west end of the fortress. This proved devastating, but indiscriminant to both Confederate and Union forces alike. Despite Battery Buchanan's guns delivering unmerciful punishment, both Pennypacker and Abbott's brigades rapidly fanned out onto the parade ground and used the forts defenses for cover.¹⁰¹

The preponderance of Union forces now concentrated at the western sally port, the weakest point of the fort. By 1545, Whiting and Lamb realized the end might prove inevitable, as they observed Union colors over the third traverse. The standard-bearer who raised the colors on the traverse was felled immediately afterwards. The stroke of luck was that the traverse was too distant and obscured observation through the smoke, because the standard-bearer hit was Colonel Pennypacker himself and along with him went several of the 97th Pennsylvania's officers as well. This resulted in several minutes with no one

leading the Union assault on the traverses. As fortune would have it, this moment was not only fleeting, but went completely unnoticed.¹⁰²

Contributing to the chaos, Colonel Moore's 203rd Pennsylvania troops forced through the sally port and onto the parade ground to reinforce both Curtis's and Abbott's forces. Whiting attempted to stall the Union advance at the third traverse. He rallied for a counter attack, but it failed and he received a serious wound during the charge. Although the Confederate's push to hold the Union forces at the third traverse failed, the sight of wounded General Whiting provided the necessary motivation to stall the Union advance at the main sally port.¹⁰³



Figure 13. View Inside the Pulpit and Bomb Proofs

Source: Mark A. Moore, *North Carolina Historic Sites: Fort Fisher*, Timothy H Sullivan pictures, 1865 (26 January 2006), <http://www.nchistoricsites.org/fisher/fisher.htm> (accessed 5 November 2008),

By approximately 1600, the Union forces completely controlled Wilmington Road and the western sally port. With the west end of the fortress captured and the momentum moving increasingly in the favor of the Union, General Ames departed from the command post to assess the progress firsthand. Ames surveyed the damage to the fort from inside, when he noticed Curtis's troops started to stall at the fourth traverse. He quickly called up the reserves from Bell's brigade to maintain the momentum. Ames intended to use the reserve forces to envelope the defenders and expedite their demise. During the maneuver of Bell's reinforcements to the fort, Bell suffered a mortal wound.¹⁰⁴

Shortly after 1600, with over 4,000 troops engaged, the majority of the land face fell firmly under Union control. Colors from all four of Bell's regiments flew over the main sally port. Porter attempted to finish driving out the remaining defenders with the fleet. He increased the rate of fire for the naval gunfire to force the defenders into a hasty retreat from the sea face traverses.¹⁰⁵

Lamb recognized the futility of another counter attack, but his passion to fight to the end prevented him from realizing it. He assembled the remaining defenders behind the pulpit (figure 13) and planned to rush the main sally port in an attempt to ebb the flow of Union forces. Lamb informed Whiting of his intentions and requested he contact Bragg again, for any reinforcements. Whiting understood Lamb's desperation and wired Bragg immediately, requested the forces, and conveyed the fact that he had received a serious wound.¹⁰⁶

Lamb with his modest contingent of defenders, some sick and others wounded, launched his final counterattack to save the fort. Lamb received a serious wound as the attack began. This essentially undermined any hope that it might succeed. The defenders

transported Lamb to the hospital bombproof under the pulpit and placed him next to Whiting (figure 13). Lamb realized then that he no longer commanded the defense of the fort, and sent for Major James Reilly. Lamb briefed him and then transferred command to Reilly from his litter in the hospital, before he and Whiting evacuated to Battery Buchanan.¹⁰⁷

Reilly now faced a daunting challenge of assembling and leading another counterattack to delay the Union advance until Bragg's forces joined the fight. Reilly managed to assemble approximately 200 troops at the base of the NE Bastion. The contingent was composed of ragged defenders and the few survivors of Hagood's troops. Out of necessity, he planned to simply to rush the main sally port and close it by any means to slow the hemorrhage of Union troops that steadily flowed inside the walls. Reilly believed this was his only option left with the troops at his disposal. He did not believe the counter-attack had a high probability of success, but in command, he must try. The attack launched and within minutes, Reilly's rush was repulsed and half of his troops cut down. The route of Reilly's counter-attack occurred as the seventh traverse fell, Curtis now sensed victory at hand.¹⁰⁸

General Ames now favored a tactical pause in order to regroup and planned to finish the fort off in the morning. Curtis, completely disagreed with his idea, and believed any pause would jeopardize their chances of success. General Terry heard both options, but favored continuing as long as they held the momentum. Curtis departed the command post and assembled more troops determined to capture and secure the NE Bastion. Luck began to wane for the Union. As Curtis rallied troops, he received a serious wound and left the fight.¹⁰⁹

As dusk settled, on the peninsula fatigue also set in and slowed the Union advance. In an effort to counter this Terry ordered Paine to maneuver one of his regiments from the XXV Corps to join the assault. Simultaneously, Abbott's 2nd brigade began to move through the western sally port. Terry directed the ravaged naval contingent to assume the blocking position to free up more of Paine's troops.

General Terry and Colonel Comstock followed the troop movements from their new command post, now inside the western walls, to monitor the progress of the assault. After personally assessing the damage, Terry was satisfied. Terry did not agree with Comstock's idea of pulling more of Paine's troops from the rear guard. Although, he did not believe that Bragg's troops would maneuver south at this point, Terry remained unwilling to assume the risk and provide an opportunity for Bragg to snatch a victory from the jaws of defeat by leaving his rear flank exposed. The fighting slowed and the Union forces drove the pockets of defenders out of the sea face and toward the south end of the peninsula.¹¹⁰

Victory

The Union forces pushed down the sea face as the Confederate defenders retreated south toward Battery Buchanan. Reilly recognized the Confederate defenders were on their last legs and the futility of attempting another counterattack. Reilly prepared to abandon the fort. Reilly notified Whiting and Lamb of his intentions, and he started to retreat toward Battery Buchanan.¹¹¹ Whiting made a final plea to Bragg in Wilmington for assistance and stated the dire state of the fort, especially with both he and Lamb wounded and out of the fight. The reports throughout the day continued and raised concern for the authorities in Wilmington. Whiting's last report compounded the anxiety, which indicated

the fort might fall without further support. This report prompted Governor Vance to wire Bragg directly and he inquired about the status of the Cape defenses.¹¹²

Bragg believed the reports exaggerated and stated the situation was under control, but he dispatched General Colquitt and a small staff to assess the fort and report back. After some thought, he reasoned the problems that Whiting had might be attributed to his abilities, and this drove him to change Colquitt's orders and to relieve Whiting and then to report his assessment of the situation. Colquitt and his contingent departed for Buchanan pier in a rowboat, and arrived at the pier at 2100 on 15 January.¹¹³

Unnoticed by Colquitt and his staff were the boats that departed the pier with Captain Robert Chapman, the battery commander of Battery Buchanan and his gun crews. Captain Chapman reached the conclusion the fort had fallen and departed early rather than become a prisoner. As Colquitt, departed the boat he noticed the abandoned battery and a steady stream of wounded defenders that started to collect at the landing.¹¹⁴ After inquiring about the location of General Whiting, he learned that he was enroute to the landing and the fort had fallen into Union hands. Colquitt dismissed the reports as incorrect and moved inland to intercept Whiting for an accurate status report. Approximately 500 yards from the landing, Colquitt found both Whiting and Lamb heading south in an ambulance, completely unaware that both were wounded, much less how serious. After Colquitt conferred with Whiting and Lamb, he learned that command passed to Major Reilly who remained at the fort.¹¹⁵

As Colquitt fully assessed the situation, he realized the fate of the fort was already sealed. Colquitt quickly returned to his boat and started back to Sugar Loaf to make his report to Bragg directly. For the duration of the transit back up the peninsula, Colquitt

remained in disbelief about the fort. The once impregnable Gibraltar of the South had fallen in less than a day. As his boat moved north, he observed the Union forces close in on the landing they just departed. Had they not made the hasty retreat, they too would now be prisoners.¹¹⁶ Major Reilly arrived at the landing, minutes after Colquitt departed, and found Whiting and Lamb and informed them he had failed and fort was now in enemy hands. Whiting, Lamb, and Reilly realized what cost the loss was to be to the south and the inevitable closure of Wilmington. The last remaining task was the arrival of the Union Generals to discuss the now unavoidable surrender of the garrison.¹¹⁷

By 2130, the Union forces arrived at the landing and General Terry with his staff arrived approximately thirty minutes later and accepted the surrender from Colonel Lamb and General Whiting. At 0100, Bragg was fully aware of Fort Fisher's unfortunate demise began the painful notification of the city officials and his chain of command. Bragg informed President Davis of the ominous news. Davis quickly inquired about the feasibility of immediately retaking the fort.¹¹⁸

Conclusion

Aside from the obvious differences between the assaults, numerous less noticeable, but critical, changes contributed to the victory. The commanders had seriously studied the previous attempt and collectively they identified several lessons learned. This proved more useful for the Army than the Navy because Porter participated in the first assault and consolidated the after action reports for the fleet.

The most useful insights dealt with command and control. General Terry landed with the troops and established a command post ashore that greatly enhanced his situational awareness of the battlefield. This allowed him to maintain a free flow of communications

between himself and his subordinate commanders. This also enabled Terry to dynamically adjust the ongoing operation quickly and efficiently. The interservice relationship between the Army and Navy commanders proved exceptional. Terry understood Porter could not come ashore to coordinate the final details of the plan while the fleet continued the barrage against Fort Fisher, so he went out to *Malvern*. The commanders collaboratively worked through the key issues and phase transition. The use of the ship's steam whistles was easily identifiable and ominous to the defenders inside the fortress.

Another instance of collaboration involved Porter's commitment of approximately 2,000 sailors and marines to the assault. It was, at a glance, a promising addition to the assault plan to add a second axis of attack against the sea face. The use of naval gunfire to suppress the defenders and drive them to the bomb proofs proved very successful at Fort Fisher. On the other hand, as in all military operations, friction prevents some things from going as planned. Porter failed to realize that to mount an assault against an elevated and fortified position was suicidal. Although the outcome proved beneficial, the assault proved costly and reckless. Porter's naval assault added value by creating a second axis. This drew the Confederate's attention away from the main effort of General Curtis's troops. It is probable that Porter attempted the second axis to increase the Navy's participation, but unlikely that he intentionally committed the sailors and marines so recklessly.

The establishment of the lodgment ashore before launching the assault proved very beneficial. The decision to wait to land the siege train until the following morning also proved to be correct. The sequencing allowed the troops to land and fortify the lodgment in addition to the supplies required to sustain the effort. This was a direct reflection of General Curtis's experience in December.

The deliberately lower rate of naval gunfire than achieved during the December assault proved proportionately more effective. Porter assigned each ship to a specific point on the fort, which maximized the effects of the naval gunfire. This allowed the ships to maximize the range of the larger guns and the defensive capability of the monitors and the *New Ironsides*. By the end of the second day General Terry acknowledged that, naval gunfire had destroyed all but a couple of the main batteries.

General Curtis recognized the advantage maintaining the momentum of the attack. This is probably why Curtis disagreed with General Ames plan to allow the army to stop. Ames recommended to Terry that the assault stop for the night after the North East Bastion fell. Curtis advocated maintaining movement as long as momentum remained. Fortunately, for the Union, Terry agreed with Curtis's assessment and continued the assault.

This might not have occurred had Terry remained afloat as General Butler had in December. Terry also managed to demonstrate an economy of force when he directed the sailors and marines from the naval elements to assume the rear guard to free up fresh troops to keep the momentum going. This allowed the naval contingent to recover after the bloody repulse they suffered at the North East Bastion while still serving a useful tactical purpose.

Finally, Porter's naval gunfire forced the Confederates to retrograde down to Battery Buchanan from the sea face. This proved beneficial in maintaining the pressure by artillery fire, because after several hours of hand-to-hand combat the Union infantry had started to flag in their progress. It is clear that the second assault achieved the requirements of a joint operation. Both commanders collaboratively planned the assault. Individually

they might not have carried the fort as quickly, but collectively they proved more than sufficient. They demonstrated that the combat power of a joint operation was far superior to poorly coordinated and separate operations by each service against the same objective--and considerably more efficient.

¹ Still, Taylor, and Delaney, *Raiders and Blockaders*, , 120; Gragg, *Goliath*, 34-35; Reed, *Combined Operations*, 331-32.

² ORN, Series 1, Vol IX, 34; Robinson, *Hurricane*, 37.

³ Ibid., Series 1, Vol IX, 34, Vol VIII, 340; Still, Taylor, and Delaney, *Raiders and Blockaders*, , 40; Canney, *Lincoln's Navy*, 292.

⁴ Davis, Perry, and Kirkley, *Military Atlas*, Plate CXXXII.

⁵ Ibid., Plate LXXV.

⁶ Gragg, *Goliath*, 3-4, 6-12; Grant, *Memoirs*, 387; Robinson, *Hurricane*, 54-55; ORN, Series 1, Vol VIII, 87. OR, Series 1, Vol XLII, Pt 1, 990; Reed, *Combined Operations*, 195; West, *Scapegoat General*, 279.

⁷ Ibid., 3, 12; Ibid., 387; Still, Taylor, and Delaney, *Raiders and Blockaders*, 118, 138; ORN, Series 1, Vol VIII, 87; Gragg, *Goliath*, 6-8, 11-12; Robinson, *Hurricane*, 55; Davis, Perry, and Kirkley, *Military Atlas*, Plate XXXIX; Fonvielle, *The Wilmington Campaign*, 21; Porter, *Naval History*, 686

⁸ Grant, *Memoirs*, 1046-47; Reed, *Combined Operations*, 326-27; Weigley, *A Great Civil War*, 324-330.

⁹ Gragg, *Goliath*, 34-35; Porter, *Naval History*, 694; Welles, *DGW*, Vol 2, 127; Symonds, *Lincoln and His Admirals*, 349; Grant, *Memoirs*, 388; Hattaway & Jones, *Military History*, 538-46; Fonvielle, *The Wilmington Campaign*, 96.

¹⁰ Jones, *Command & Strategy*, 212-13; Grant, *Memoirs*, 635-36, 388-90; Sherman, *Memoirs*, , 586-89, 701-06. Congress, U.S. *The Fort Fisher Expedition: Report of the Joint Committee of the Conduct of the War, 38th Congress, 2nd Sesssion* (Wilmington, NC: Broadfoot Publishing, 1998), Vol 5, 3; Weigley, *A Great Civil War*, 417; Symonds, *Lincoln and His Admirals*, 349-50.

¹¹ Reed, *Combined Operations*, 15, 21-24, 100; Sherman, *Memoirs*, 897; Foote, *Red River to Appomattox*, , 624-26; Long and Long, *The Civil War Day by Day*, 594; McPherson, *Ordeal by Fire*, 440-42; Weigley, *A Great Civil War*, 355-57, 210-17.

¹² McPherson, *Battle Cry of Freedom*, 371-73, 819; Browning, *Cape Fear*, 284-86; ORN, Series 1, Vol XI, 210-17; Scheller, *Civil War Seal*, 48-51; Davis, Perry, and Kirkley, *Military Atlas*, Plate 76, 139; Gragg, *Goliath*, 12, 33, 35.

¹³ Gragg, *Goliath*, 35-36; Grant, *Memoirs*, 388, 662-63; Hattaway & Jones, *A Military History*, 528.

¹⁴ Welles, *DGW*, 145-47; Canney, *Lincoln's Navy*, 293, 315; Gragg, *Goliath*, 33-34; ORN, Series 1, Vol IX, 34; Symonds, *Lincoln and His Admirals*, 315.

¹⁵ Canney, *Lincoln's Navy*, 293; Gragg, *Goliath*, 34; ORN, Series 1, Vol X, 473, 530; Grant, *Memoirs*, 388-90. West, *Scapegoat General*, 279; Sherman, *Memoirs*, 700-706.

¹⁶ Fonvielle, *The Wilmington Campaign*, 38-41; Gragg, *Goliath*, 16-26; Robinson, *Hurricane*, 32-40; Southern Historical Society. *The Southern Historical Society Papers, A Compilation of the Official Records of the Confederate Armies* (Milwood, NY: Kraus Publishing, 1887-1910), Vol 21, 259-60.

¹⁷ *Ibid.*, 30, 35-39, 41; *Ibid.*, 17; *Ibid.*, 30-33; OR, Series I, Vol XLII, 407; SHSP, Vol 21, 259-66.

¹⁸ C. Van Woodward & Elisabeth Muhlenfield. *The Private Mary Chestnut: Unpublished Civil War Diaries* (New York, NY: Oxford University Press, 1984), 13; Robinson, *Hurricane*, 32-33, 188-90; SHSP, Vol 21, 259-266.

¹⁹ Porter, *Naval History*, 688, 401-03; Robinson, *Hurricane*, 58, 61-63; Scheller, *Civil War Seal*, 48-51.

²⁰ There were larger fleets of transports assembled the example being the one assembled by McClellan for the Peninsular Campaign, but it was the largest fleet of combatant ships for the purpose of laying siege to a coastal fortification from the sea.

²¹ Canney, *Lincoln's Navy*, 295; *Joint Report*, Vol 5, 51; Gragg, *Goliath*, 42; West, *Scapegoat General*, 278.

²² Grant, *Memoirs*, 388-90; West, *Scapegoat General*, 279-80; Gragg, *Goliath*, 39-40; McPherson, *Battle Cry of Freedom*, 419; Weigley, *A Great Civil War*, 117-18, 344; Foote, *Red River to Appomattox*, 251-59; Long and Long, *The Civil War Day by Day*, 594; Fonvielle, *The Wilmington Campaign*, 99-100; Reed, *Combined Operations*, 337.

²³ Fonvielle, *The Wilmington Campaign*, 99-102; Gragg, *Goliath*, 40; West, *Scapegoat General*, 280-81; Reed, *Combined Operations*, 337; ORN, Series 1, Vol XI, 207-14, 254-60; Grant, *Memoirs*, 663; Welles, *DGW*, Vol 2, 209, 211; OR, Series 1, Vol XLII, 988-90.

²⁴ Union troops after capturing the fortress were inspecting the fortress and inadvertently detonated a powder magazine significantly weakening the wall and creating a small breaching on the land face.

²⁵ ORN, Series 1, Vol XI, 254-60, 78, 119, 234; OR, Series 1, Vol XLII, 988-90. Gragg, *Goliath*, 41; Fonvielle, *The Wilmington Campaign*, 101-02; West, *Scapegoat General*, 282; Grant, *Memoirs*, 663; Symonds, *Lincoln and His Admirals*, 349; Welles, *DGW*, Vol 2, 214, 216-17.

²⁶ Gragg, *Goliath*, 36-37; Grant, *Memoirs*, 388-90, 663, 649-50; West, *Scapegoat General*, , 280; Sherman, *Memoirs*, 701-06.

²⁷ OR, Series 1, Vol XLII, 974, 970, 1225, 760; Fonvielle, *The Wilmington Campaign*, 102-103; Gragg, *Goliath*, 42; Joint Report, Vol 5, 73-74; Richard S. West. *Mr Lincoln's Navy* (New York, NY: Longmans, Green and Company, 1957), 296.

²⁸ Fonvielle, *The Wilmington Campaign*, 107-108.

²⁹ Ibid., 103-108; West, *Scapegoat General*, 283; Robinson, *Hurricane*, 108-109; Porter, *Incidents and Anecdotes*, 271; Tucker, *Civil War at Sea*, 167.

³⁰ ORN, Series 1, Vol XI, 191; OR, Series 1, Vol XLII, 964, 967, 1049; Fonvielle, *The Wilmington Campaign*, 108-109; West, *Scapegoat General*, 283; Robinson, *Hurricane*, 111; Joint Report, Vol 5, 17.

³¹ OR, Series 1, Vol XLII, 965, 988-90, 1297-99, 1301; ORN, Series 1, Vol 11, 223-28; Robinson, *Hurricane*, 118, 112; West, *Scapegoat General*, 285; Gragg, *Goliath*, 50-51; Joint Report, Vol 5, 244-55; Grant, *Memoirs*, 391; Fonvielle, *The Wilmington Campaign*, 113; SHSP, Vol 21, 267.

³² Ibid., Series 1, Vol XLII, PT 1, 979; SHSP, Vol 21, 269; Fonvielle, *The Wilmington Campaign*, 122-125.

³³ ORN, Series 1, Vol XI, 254-60; Robinson, *Hurricane*, 121-23; David Page. *Ships Versus Shore, Civil War Engagements Along the Southern Shores and Rivers* (Nashville, TN: Rutledge Hill Press, 1994), 87; Porter, *Naval History*, 696; Grant, *Memoirs*, 664.

³⁴ OR, Series 1, Vol XLII, 988-90; Robinson, *Hurricane*, 124, 128, 132.

³⁵ ORN, Series I, Vol XI, 254-60; West, *Scapegoat General*, 285.

³⁶ Gragg, *Goliath*, 74-75.

³⁷ OR, Series 1, Vol XLII, 967; Robinson, *Hurricane*, 131-32.

³⁸ ORN, Series 1, Vol XI, 254-60; OR, Series 1, Vol XLII, 982-85, 1021; Fonvielle, *The Wilmington Campaign*, 148; Robinson, *Hurricane*, 134.

³⁹ Fonvielle, *The Wilmington Campaign*, 151-53. Page, *Ships Versus Shore*, 89; Robinson, *Hurricane*, 133.

⁴⁰ ORN, Series 1, Vol XI, 258; Porter, *Naval History*, 698; Gragg, *Goliath*, 83-85; Scheller, *Civil War Seal*, 88-89.

⁴¹ Bombproofs were just reinforced bunkers that served as a bomb shelter to survive naval gunfire. See photo of the Pulpit in figure 13.

⁴² ORN, Series 1, Vol XI, 254-260; OR, Series 1, Vol XLII, 982-87, 1026; Fonvielle, *The Wilmington Campaign*, 155-59, 166-67; Joint Report, Vol 5, 24; Gragg, *Goliath*, 90-93, 137.

⁴³ OR, Series 1, Vol XLII, 983-87; Fonvielle, *The Wilmington Campaign*, 160-66; Gragg, *Goliath*, 92-93, 89; West, *Scapegoat General*, 289-90.

⁴⁴ Ibid., Series 1, Vol XLII, 981-85; Ibid., 159-63; Gragg, *Goliath*, 95.

⁴⁵ Ibid., Series 1, Vol XLII, 982-85; Ibid., 163, 165-66; Ibid., 92-93; Robinson, *Hurricane*, 141.

⁴⁶ Gragg, *Goliath*, 89; ORN, Series 1, Vol XI, 254-260, 250-51; OR, Series 1, Vol XLII, 968, 983; Fonvielle, *The Wilmington Campaign*, 166-70; Robinson, *Hurricane*, 139-40.

⁴⁷ OR, Series 1, Vol XLII, 980-84; Fonvielle, *The Wilmington Campaign*, 169-70; Gragg, *Goliath*, 95-96; Robinson, *Hurricane*, 139; OR, Series 1, Vol XLII, 982-85.

⁴⁸ ORN, Series 1, Vol XI, 263-65, 252-53; Robinson, *Hurricane*, 141; Gragg, *Goliath*, 97-98.

⁴⁹ Ibid., Series 1, Vol XI, 394, 442-51, 405; Ibid., 109, 124, 51; Fonvielle, *The Wilmington Campaign*, 306-07.

⁵⁰ Joint Report, Vol 5, 95, 69, 79; OR, Series 1, Vol XLII, 985-86; Fonvielle, *The Wilmington Campaign*, 104, 109; West, *Scapegoat General*, 282; ORN, Series 1, Vol XI, 254.

⁵¹ Fonvielle, *The Wilmington Campaign*, 109, 104.

⁵² OR, Vol XLII, Part 3, 1087; Fonvielle, *The Wilmington Campaign*, 183; Grant, *Memoirs*, 668; Porter, *Naval History*, 702-705; Symonds, *Lincoln and His Admirals*, 348-351; Welles, *DGW*, Vol 2, 209-210.

⁵³ Ibid., Vol XLII, Part 3, 1100-1101, 1099; ORN, Vol 11, 401; Fonvielle, *The Wilmington Campaign*, 186-187; Porter, *Naval History*, 700-704; Symonds, *Lincoln and His Admirals*, 348-350; Welles, *DGW*, Vol 2, 213.

⁵⁴ Ibid., Vol XLII, Part 3, 1087; Basler, *Collected Works*, 207; Porter, *Naval History*, 704; Symonds, *Lincoln and His Admirals*, 349; Welles, *DGW*, Vol 2, 209, 214; Fonvielle, *The Wilmington Campaign*, 191-192.

⁵⁵ Ibid., Vol XLII, Part 3, 1100-1101, 1099; ORN, Vol 11, 401; Welles, *DGW*, Vol 2, 209, 214-215, 221; Grant, *Memoirs*, 667-668; Sherman, *Memoirs*, 586-587; Symonds, *Lincoln and His Admirals*, 350.

⁵⁶ Ibid., Vol XLVI, Part 2, 29; Joint Report, Vol 5, VII; Welles, *DGW*, Vol 2, 209-210; Grant, *Memoirs*, 668; Basler, *Collected Works*, 207, 215; Symonds, *Lincoln and His Admirals*, 350; Fonvielle, *The Wilmington Campaign*, 189; West, *Mr Lincoln's Navy*, 300.

⁵⁷ Ibid., Vol XLVI, Part 2, 25; ORN, Vol 11, 432; Porter, *Naval History*, 711; Fonvielle, *The Wilmington Campaign*, 201, 204.

⁵⁸ Ibid., XLII, pt. 3, 1091.

⁵⁹ Ibid., Vol XLVI, Part 2, 25-26; Welles, *DGW*, Vol 2, 220; Joint Report, Vol 5, 220; Fonvielle, *The Wilmington Campaign*, 220; West, *Mr Lincoln's Navy*, 300.

⁶⁰ Fonvielle, *The Wilmington Campaign*, 202-203.

⁶¹ OR, Vol XLVI, Part 2, 1000-1001.

⁶² Ibid., Vol XLVI, Part 2, 1000-1001; SHSP, Vol 21, 276.

⁶³ Ibid., Vol XLII, Part 3, 1360-1361.

⁶⁴ Ibid., Vol XLVI, Part 2, 1000-1002; Part 3, 1360-1361.

⁶⁵ Ibid., Vol XLVI, Part 2, 1002, 1023-1024; ORN, Vol 11, 747.

⁶⁶ Ibid., Vol XLVI, Part 2, 1043, 1045, 1050, 1015; Ibid., Vol 11, 747; SHSP, Vol 21, 276-277.

⁶⁷ Ibid., Vol XLVI, Part 1, 431; Ibid., Vol 11, 492, 438, 427; Ibid., Vol 21, 276-277.

⁶⁸ Gragg, *Goliath*, 114-115.

⁶⁹ OR, Vol XLVI, Part 1, 431; ORN, Vol 11, 492.

⁷⁰ Ibid., Vol XLVI, Part 1, 396.

⁷¹ Ibid., Vol XLVI, Part 1, 396; Porter, *Naval History*, 714.

⁷² Ibid., Vol XLVI, Part 1, 396; ORN, Vol 11, 438.

⁷³ Ibid., Vol XLVI, Part 2, 69; Ibid., Vol 11, 438; Joint Report, Vol 5, 76, 90.

⁷⁴ Ibid., Vol XLVI, Part 1, 432; Part 2, 1047-1048; SHSP, Vol 23, 167-168.

⁷⁵ ORN, Vol 11, 438, 427; Porter, *Naval History*, 714-715.

⁷⁶ Ibid., Vol 11, 438; Ibid., 714-715.

⁷⁷ Ibid., Vol 11, 438, 464; Ibid., 714-715.

⁷⁸ OR, Vol XVIII, 770-775

⁷⁹ Ibid., Vol XLVI, Part 2, 1056.

⁸⁰ Ibid., Vol XLVI, Part 2, 432, 1047-1048, 1057; SHSP, Vol 10, 347-348; Porter, *Naval History*, 714-715.

- ⁸¹ Ibid., Vol XLVI, Part 1, 396; ORN, Vol 11, 433-438; SHSP, Vol 21, 277.
- ⁸² Ibid., Vol XLVI, Part 2, 1056-1057; Ibid., Vol 11, 438; Ibid., Vol 21, 277.
- ⁸³ Ibid., Vol XLVI, Part 1, 423-424; Part 2, 396; Porter, *Naval History*, 714-715.
- ⁸⁴ ORN, Vol 11, 439, 446, 448, 454, 527; Gragg, *Goliath*, 141-142.
- ⁸⁵ Ibid., Vol 11, 446, 476, 510, 576-577.
- ⁸⁶ Ibid., Vol 11, 446, 497-498, 576; Porter, *Naval History*, 714-716; Robinson, *Hurricane*, 159.
- ⁸⁷ Ibid., Vol 11, 446 -447, 494-495; Joint Report, Vol 5, 115; Gragg, *Goliath*, 142-143.
- ⁸⁸ Ibid., Vol 11, 439; Joint Report, Vol 5, 115.
- ⁸⁹ OR, Vol XLVI, Part 2, 1062-1065.
- ⁹⁰ Robinson, *Hurricane*, 161-162
- ⁹¹ OR, Vol XLVI, Part 2, 69, 1398; ORN, Vol 11, 441, 446-447, 576; SHSP, Vol 21, 76, 90; Porter, *Naval History*, 714-716.
- ⁹² ORN, Vol 11, 446.
- ⁹³ Robinson, *Hurricane*, 140, 167.
- ⁹⁴ ORN, Vol 11, 495-499; Robinson, *Hurricane*, 168.
- ⁹⁵ OR, Vol XLVI, Part 1, 398; Ibid., 172.
- ⁹⁶ SHSP, Vol 10, 362; Vol 21, 280.
- ⁹⁷ Ibid., Vol 10, 362; Vol 21, 280-281.
- ⁹⁸ ORN, Vol 11, 438, 446; Porter, *Naval History*, 714-716.
- ⁹⁹ OR, Vol XLVI, Part 1, 398, 417; Gragg, *Goliath*, 176-177.
- ¹⁰⁰ Ibid., Vol XLVI, Part 1, 418-419.
- ¹⁰¹ Ibid., Vol XLVI, Part 1, 418-419; SHSP, Vol 10, 362; Vol 21, 282.
- ¹⁰² Ibid., Vol XLVI, Part 1, 420.
- ¹⁰³ Ibid., Vol XLVI, Part 1, 440; Gragg, *Goliath*, 191-193.
- ¹⁰⁴ Ibid., Vol XLVI, Part 1, 420.
- ¹⁰⁵ Ibid., Vol XLVI, Part 1, 420.

¹⁰⁶ Ibid., Vol XLVI, Part 2, 1060-1064; SHSP, Vol 21, 282.

¹⁰⁷ SHSP, Vol 21, 282-285.

¹⁰⁸ OR, Vol XLVI, Part 1, 403; SHSP, Vol 21, 285-286.

¹⁰⁹ Ibid., Vol XLVI, Part 1, 399.

¹¹⁰ Ibid., Vol XLVI, Part 1, 399.

¹¹¹ Ibid., Vol XLVI, Part 1, 410-411, 413-415.

¹¹² Ibid., Vol XLVI, Part 1, 413-415; SHSP, Vol 21, 288.

¹¹³ Ibid., Vol XLVI, Part 1, 410-411; Ibid., Vol 21, 288.

¹¹⁴ SHSP, Vol 21, 285-286.

¹¹⁵ Ibid., Vol 21, 285-286.

¹¹⁶ Ibid., Vol 21, 285-287.

¹¹⁷ Ibid., Vol 21, 288.

¹¹⁸ Ibid., Vol 21, 287-289.

CHAPTER 6

Major Findings

The capture of Fort Fisher in January 1865 was clearly the result of a successful joint amphibious operation. The Army and Navy successfully employed their forces to achieve a common objective. The evidence suggests that the capture of Fort Fisher demonstrated that opposed amphibious assaults were viable operations in the industrial era. The January assault and subsequent capture validated the concept of a successful amphibious landing against a determined defense. To that point, the Union had attempted landings previously with various degrees of success. However, the fruits of this experience remained uncoded and were not incorporated into formal U.S. military doctrine until after World War I.¹

The integration between the services required for these joint operations uncovered numerous requirements and capability gaps. These ranged from: command and control, formal and informal command relationships, supporting and supported command relationships, logistical support infrastructure, synchronization and sequencing, contingency planning, naval gunfire support, procedures for integrating combined arms assaults, cross service capabilities and limitations, and clarification of commanders intent and orders production in joint operations.

Amphibious landings provided the Union an operational power projection capability that Lincoln's cabinet and military staff desired. Initially the Union Navy did not have a fleet capable of establishing local command of the sea in order to support an amphibious assault--this capability required time to develop. The Union quickly rectified this situation and assembled the largest fleet of ships to that point in U.S. history.

As the fleet expanded in size, its participation in combined arms assaults increased proportionately. Operations were constrained to the western rivers and coastal areas. The Army, the more prominent service during the Civil War, informally relegated the Navy to a supporting role in its operations. Unfortunately, this tended to foster parochial interservice rivalry. Army-Navy rivalry brought to light the need to establish clearly defined roles between supporting and supported commanders to create a unity of effort. Although the concept of supporting versus supported commanders is of recent vintage and did not mature until well into the twentieth century, General Grant's approach is an example of the benefits resulting from a solid understanding of this concept.²

The Navy recognized the importance of its supporting role after it gained control, and exercised unrestricted use of the enemy's important coastal waters. Secretary Welles and Assistant Secretary Fox deserve the lion's share of credit for clearly seeing the Navy's role as a supporting force for most of the joint operations during the civil war. As the scope of the blockade increased, the Union systematically closed the principal Confederate trading ports. The blockade only increased the control the Union held over the coastal waters. This allowed the fleet to participate in more complex joint operations as the war progressed. On the other hand, the amount of coastline blockaded taxed the logistics required for an expanding fleet. The need for logistical staging bases to sustain the blockade fleets over long distances and extended durations emerged. The choice of staging bases needed to consider both regionally centralized locations and coastal hydrography. Once the Navy established these support bases (such as at Port Royal), the fleet increased its on station time which further tightened the chokehold the Union held on the Confederate economy. It was in this manner that Wilmington became more and more important as the

Union Navy interdicted maritime traffic accessing the decreasing number of open ports along the Confederate coastline.

The fleet that the Union built had limitations. Most of the ships developed, converted, built, or purchased proved unsuitable for operations outside of coastal waters. The ironclads and monitors suffered from poor seaworthiness attributed to low freeboard that made them very vulnerable to heavy weather. This limited the ships due to the limited number of natural harbors and the deep draft that converted iron clad ships drew. This in turn drove the introduction of the shallow draft monitor class.³ Their design restricted maneuverability due to weight and inefficient steerage, despite steam propulsion. The iron plating provided them with the ability to withstand considerable cannon fire and deliver equal or superior damage to fortifications. They retained the ability to maneuver out of range to make repairs which allowed another ship to take its place on the gun line. This tactical employment enabled the Union ships to sustain a cannon barrage and stand up to fortified shore installations. The development of increasingly larger and more powerful guns provided them with range and smashing power.⁴ Several of the Dahlgren guns reached calibers of fifteen inches. The cannons proved capable to deliver 350 to 400 pound shells or shot respectively at ranges out to 2,000 yards. These weapons wreaked havoc on masonry fortifications. The increased ranges also enabled them to fire at maximum range of the fortifications' counter battery fire which further minimized the effects of the Confederate shells aimed at maneuvering targets.

Even with the Navy's ships being restricted to coastal waters, the Union Fleet exercised a freedom unrivaled by all but a few Confederate vessels. The many weeks spent on station in support of the blockade provided unlimited training time that increased the

lethality of naval gunfire--a lethality that was driven home at Fort Fisher. It became clear as early as 1862 that the Union fleet had developed ships capable of accurate and sustained naval gunfire capable of suppressing most fortifications. This accuracy coupled with massive firepower fostered an increased interest in joint operations which utilized combined arms assaults. The Union Navy came to fulfill the role of highly mobile artillery on the coastal and riverine battlefield. This capability allowed the Union forces to maneuver and conduct siege operations under the protection of mobile naval gunfire. Fort Fisher demonstrated the highly effective evolution of this capability.

Despite the fact that the first attempt on Fort Fisher failed, it demonstrated the utility of phasing, sequencing, and rehearsing complex ship to shore movements. The evidence presented supports the fact that the first assault served as a sort of “live fire” amphibious rehearsal. The fleet achieved suppression of the fort and effected a landing. Most importantly, Admiral Porter consolidated after the action reports that provided material to develop lessons learned and areas to improve on for the second assault.

As joint operations became more and more common, they generated the need for each service to better understand the other's capabilities and limitations. The understanding of what was required of each service to support the other became paramount as operations increased in size and complexity. In the Civil War, there was no more complicated operation than an opposed amphibious landing. Phasing operations and the sequencing required to execute them efficiently were of particular importance. The phasing proved critical in masking the main effort during the second assault on Fort Fisher.

The final area for discussion concerns formal versus informal command and control at the operational level. The Union only lacked the right commander with unique abilities

to exercise formal and informal authority over joint forces. General Grant's appointment to General in Chief filled this need. His appointment carried no new authority, but he possessed the force of personality to exercise influence over other service commanders and the knowledge to employ them effectively in battle. His solid understanding of joint operations, gained in the western theater, proved invaluable in the planning and developing joint plans. His first attempt at Fort Fisher proved unsuccessful, attributable to his lapse in judgment which allowed General Butler to become involved far more intimately with the actual operation than Grant had perhaps intended. The second attempt proved he was a learning commander because he crafted orders and selected the right leader (General Terry) to work with Admiral Porter, Secretary Welles choice as the naval commander.

Areas for Future Research

The study focused on the assaults at Fort Fisher, North Carolina. It provided the necessary insight to evaluate the viability of opposed amphibious operations in the context of the American Civil War. Further analysis of other joint operations during the war might reveal other aspects not touched or simply not identified, in particular the operations of General Quincy Gilmore and Admiral John Dahlgren at Charleston in 1864.

Although this study focused on the development of joint operations and the innovations required to support that capability, the research uncovered several aspects that if further investigated might present an alternative perspective. Most developed nations of the time observed the conflict and all provided advisors to gather and collect data to further their militaries. Captain Justus Scheibert, a Prussian observer spent considerable time with the Confederate forces, observed an attempted siege of Charleston, and personally

inspected Fort Fisher with Colonel Lamb. It is possible they identified other aspects beyond the scope of this monograph that warrant further research.⁵

Final Thoughts

Amphibious landings during the Civil War started as unopposed deployments or logistical movements, but with the increased capability of the Union Navy's firepower, coupled with the advantages demonstrated in combined arms assaults, they paved the way toward successful opposed landings. This trend was the culmination of numerous advances that ranged from technical, tactical, operational, organizational, and functional. Only after all of these capabilities matured was the concept proven under fire. The Navy clearly took the lead to develop this concept and the operational procedures. This may be due, in part, to the Navy's efforts to remain relevant in a land-centric war. Welles, Fox, Stanton, Grant, Porter, and Terry contributed significantly to the evolution of opposed amphibious landings and modern joint operations as reflected by the campaign to seize Fort Fisher and neutralize Wilmington, North Carolina.

¹ Murray & Millett, *Military Innovation*, 50.

² Joint Publication 1-02, 529.

³ Converted Iron Clad warships draft drew between 22' to 27' and the shallow draft Monitors drew 9' to 11'.

⁴ Howard J. Fuller, *Clad in Iron* (Westport, CT: Praeger, 2008), 261-262.

⁵ Captain Justus Scheibert, translated by Joseph Hayes. *Seven Months in the Rebel States during the North American War, 1863* (Columbia, MO: University of Missouri Press, 1863 (2001)), 132, 140.

GLOSSARY

Alliance--The relationship that results from a formal agreement (e.g., treaty) between two or more nations for broad, long-term objectives that further the common interests of the members. See also coalition; multinational.

Battery--1. Tactical and administrative artillery unit or subunit corresponding to a company or similar unit in other branches of the Army. 2. All guns, torpedo tubes, searchlights, or missile launchers of the same size or caliber or used for the same purpose, either installed in one ship or otherwise operating as an entity.

Blocking Position--A defensive position so sited as to deny the enemy access to a given area or to prevent the enemy's advance in a given direction.

Bomb Proof--A military bunker is a hardened shelter, often buried partly or fully underground, designed to protect the inhabitants from falling bombs or other attacks.

Center of Gravity--The source of power that provides moral or physical strength, freedom of action, or will to act. Also called COG. See also decisive point.

Cheval de Frise--The cheval de frise was a medieval defensive work or obstacle consisting of a portable frame (sometimes just a simple log) covered with many long iron or wooden spikes or even actual spears. They were principally intended as an anti-cavalry obstacle but could also be moved quickly to help block a breach in another barrier.

Coalition--An ad hoc arrangement between two or more nations for common action. See also alliance; multinational.

Combined--Between two or more forces or agencies of two or more allies. (When all allies or services are not involved, the participating nations and services shall be identified, e.g., combined navies.) See also joint.

Combined Arms--(Army) The synchronized or simultaneous application of several arms--such as infantry, armor, field artillery, engineers, air defense, and aviation--to achieve an effect on the enemy that is greater than if each arm were used against the enemy in sequence. (FM 3-0) (Marine Corps) The full integration of combat arms in such a way that to counteract one, the enemy must become more vulnerable to another. See also task force.

Combined Force--A military force composed of elements of two or more allied nations. See also force(s).

Decisive Point--A geographic place, specific key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an adversary or contribute materially to achieving success. See also center of gravity.

Economy of Force--Economy of force is the judicious employment and distribution of forces. It is the measured allocation of available combat power to such tasks as limited attacks, defense, delays, deception, or even retrograde operations to achieve mass elsewhere at the decisive point and time.

Feint--In military deception, an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and/or time of the actual main offensive action.

Gun line--The gun line or line-of-battle tactic required ships to form long single-file lines and close with the enemy fleet on the same tack, battering the other fleet until one side had had enough and retreated. Any maneuvers would be carried out with the ships remaining in line for mutual protection.

Iron clad--An ironclad was a steam-propelled warship in the later part of the 19th century, protected by iron or steel armor plates. The ironclad was developed as a result of the vulnerability of wooden warships to explosive or incendiary shells.

Joint--Connotes activities, operations, organizations, etc., in which elements of two or more Military Departments participate.

Joint Amphibious Operation--(*) An amphibious operation conducted by significant elements of two or more Services.

Legitimacy--The purpose of legitimacy is to develop and maintain the will necessary to attain the national strategic end state. Legitimacy is based on the legality, morality, and rightness of the actions undertaken. Legitimacy is frequently a decisive element. Interested audiences may include the foreign nations, civil populations in the operational area, and the participating forces.

Line of Communication--A route, either land, water, and/or air, that connects an operating military force with a base of operations and along which supplies and military forces move. Also called LOC.

Line of Operation--1. A logical line that connects actions on nodes and/or decisive points related in time and purpose with an objective(s). 2. A physical line that defines the interior or exterior orientation of the force in relation to the enemy or that connects actions on nodes and/or decisive points related in time and space to an objective(s). Also called LOO.

Lodgment--The action of establishing oneself or making good a position on an enemy's ground, or obtaining a foothold; hence, a stable position gained, a foothold.

Landing area--That part of the operational area within which are conducted the landing operations of an amphibious force. It includes the beach, the approaches to the beach, the transport areas, the fire support areas, the airspace occupied by close supporting aircraft, and the land included in the advance inland to the initial objective.

Maneuverability--The purpose of maneuver is to place the enemy in a position of disadvantage through the flexible application of combat power. Maneuver is the movement of forces in relation to the enemy to secure or retain positional advantage, usually in order to deliver--or threaten delivery of--the direct and indirect fires of the maneuvering force. Effective maneuver keeps the enemy off balance and thus also protects the friendly force. It contributes materially in exploiting successes, preserving freedom of action, and reducing vulnerability by continually posing new problems for the enemy.

Mass--The purpose of mass is to concentrate the effects of combat power at the most advantageous place and time to produce decisive results.

Monitor--A monitor was a type of relatively small warship which was neither fast nor strongly armored but carried disproportionately large guns and was used by some navies from the 1860s until the end of the Second World War. The monitors of the 19th century were turreted ironclad warships inspired by the original USS Monitor; as well as coastal ships.

Multinational--Between two or more forces or agencies of two or more nations or coalition partners. See also alliance; coalition.

Naval Gunfire Support--Fire provided by Navy surface gun systems in support of a unit or units tasked with achieving the commander's objectives. A subset of naval surface fire support. Also called NGFS. See also naval surface fire support.

Objective--a. The purpose of the objective is to direct every military operation toward a clearly defined, decisive, and achievable goal. The purpose of military operations is to achieve the military objectives that support attainment of the overall political goals of the conflict. This frequently involves the destruction of the enemy armed forces' capabilities and their will to fight. The objective of joint operations not involving this destruction might be more difficult to define; nonetheless, it too must be clear from the beginning. Objectives must directly, quickly, and economically contribute to the purpose of the operation. Each operation must contribute to strategic objectives. JFCs should avoid actions that do not contribute directly to achieving the objective(s).

Offensive--The purpose of an offensive action is to seize, retain, and exploit the initiative. Offensive action is the most effective and decisive way to achieve a clearly defined objective. Offensive operations are the means by which a military force seizes and holds the initiative while maintaining freedom of action and achieving decisive

results. The importance of offensive action is fundamentally true across all levels of war. c. Commanders adopt the defensive only as a temporary expedient and must seek every opportunity to seize or re seize the initiative. An offensive spirit must be inherent in the conduct of all defensive operations.

Opposed landing--The ship to shore movement by forces onto a hostile beach head, that the enemy is actively defending and attempting to prevent landing and establishing a lodgment.

Palisade--A palisade is a steel or wooden fence or wall of variable height, usually used as a defensive structure.

Perseverance--The purpose of perseverance is to ensure the commitment necessary to attain the national strategic end state. Prepare for measured, protracted military operations in pursuit of the national strategic end state. Some joint operations may require years to reach the termination criteria. The underlying causes of the crisis may be elusive, making it difficult to achieve decisive resolution. The patient, resolute, and persistent pursuit of national goals and objectives often is a requirement for success. This will frequently involve diplomatic, economic, and informational measures to supplement military efforts.

Ranks--The rank system prior to 1862 was as follows: Midshipman, Passed Midshipman, Master, Lieutenant, Commander, Captain. From 1862 on, it became Ensign, Master, Lieutenant, Lieutenant Commander, Captain, Commodore, Rear Admiral. During the war, there were also the ranks of Acting Ensign, Acting Master, and Acting Lieutenant for volunteers who served until the end of the war and were then discharged (though a few officers did receive permanent commissions). Though a Lieutenant outranked an Acting Lieutenant, the position filled was much the same and the distinction is ignored below, as is the distinction between Midshipman, Passed Midshipman, and Acting Midshipman. This is done in the interest of brevity. The rank of Master is generally ignored in the following list as well, largely because the majority of officers who commanded ironclads were long past that rank by the time of the Civil War. (The rank was replaced in later years by the rank of Lieutenant (Junior Grade).) Previously, a Lieutenant commanding a vessel was often referred to as a "Lieutenant-Commanding" and a Captain in charge of several vessels was referred to as a "Commodore" but neither of these were official ranks until 1862.

Reconnoiter--A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

Restraint--The purpose of restraint is to limit collateral damage and prevent the unnecessary use of force. A single act could cause significant military and political consequences; therefore, judicious use of force is necessary. Restraint requires the

careful and disciplined balancing of the need for security, the conduct of military operations, and the national strategic end state. For example, the exposure of intelligence gathering activities (e.g., interrogation of detainees and prisoners of war) could have significant political and military repercussions and therefore should be conducted with sound judgment. Excessive force antagonizes those parties involved, thereby damaging the legitimacy of the organization that uses it while potentially enhancing the legitimacy of the opposing party.

Retrograde--is movement in the opposite direction of attack, also retreating.

Security--Security enhances freedom of action by reducing friendly vulnerability to hostile acts, influence, or surprise. Security results from the measures taken by commanders to protect their forces. Staff planning and an understanding of enemy strategy, tactics, and doctrine will enhance security. Risk is inherent in military operations. Application of this principle includes prudent risk management, not undue caution. Protecting the force increases friendly combat power and preserves freedom of action.

Simplicity--The purpose of simplicity is to prepare clear, uncomplicated plans and concise orders to ensure thorough understanding. Simplicity contributes to successful operations. Simple plans and clear, concise orders minimize misunderstanding and confusion. When other factors are equal, the simplest plan is preferable. Simplicity in plans allows better understanding and execution planning at all echelons. Simplicity and clarity of expression greatly facilitate mission execution in the stress, fatigue, and other complexities of modern combat and are especially critical to success in multinational operations.

Skirmisher--Skirmishers are infantry or cavalry soldiers stationed ahead or alongside of a larger body of friendly troops. They are usually placed in a skirmish line to either harass enemy troops or to protect their own troops from similar attacks by the enemy.

Surprise--The purpose of surprise is to strike at a time or place or in a manner for which the enemy is unprepared. Surprise can help the commander shift the balance of combat power and thus achieve success well out of proportion to the effort expended. Factors contributing to surprise include speed in decision-making, information sharing, and force movement; effective intelligence; deception; application of unexpected combat power; OPSEC; and variations in tactics and methods of operation.

Torpedo--Prior to the invention of the self-propelled torpedo, the term was applied to any number of different types of explosive devices, generally having the property of being secret or hidden, including devices which today would include booby traps, land mines, naval mines and others.

Traverse--A fortified gun emplacement in a fortified position, which allowed a small degree of movement, but also provided protection for the gun crew.

Unity of Command--The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective. Unity of command means that all forces operate under a single commander with the requisite authority to direct all forces employed in pursuit of a common purpose. During multinational operations and interagency coordination, unity of command may not be possible, but the requirement for unity of effort becomes paramount. Unity of effort--coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization--the product of successful unified action.

Unopposed Landing--The ship to shore movement by forces onto a hostile beach head, that the enemy is not actively defending or attempting to prevent landing and establishing a lodgment.

APPENDIX A

Union Naval Order of Battle--1st Assault

Vessel Name	Captain/Master	Guns
<hr/>		
<u>Gun Line #1</u>		
1. Kansas	Lt.Cmdr. Pendleton G. Watmough	8
2. Neurus	Cmdr. John C. Howell	9
3. Pontoosuc	Lt.Cmdr. William G. Temple	12
4. Pequot	Lt.Cmdr. Daniel L. Braine	8
5. Huron	Lt.Cmdr. Thomas O. Selfridge	5
6. Unadilla	Lt.Cmdr. Frank M. Ramsay	6
7. Nyack	Lt.Cmdr. L. Howard Newman	8
8. Mahopac	Lt.Cmdr. Edward Potter	2
9. Saugus	Cmdr. Edmund Colhoun	2
10. Monodnock	Cmdr. Enoch G. Parrott	4
11. Canonicus	Lt.Cmdr. George Beiknap	2
12. New Ironsides	Cmdr. William Radford	20
<u>Gun Line #2</u>		
1. Vanderbilt	Capt. Charles W. Pickering	16
2. Minnesota	Commo. Joseph Lanman	46
3. Mohican	Cmdr. Daniel Ammen	9
4. Yantic	Lt.Cmdr. Thomas Harris	4
5. Colorado	Commo. Henry K. Thatcher	50
6. Maumee	Lt.Cmdr. Ralph Chandler	8
7. Tuscarora	Cmdr. James M. Frailey	10
8. Mackinaw	Cmdr. John C. Beaumont	10
9. Wabash	Capt. Melancton Smith	44
10. Ticonderoga	Capt. Charles Steedman	14
11. Susquehanna	Commo. Sylvanus W. Godon	18
12. Pawtuxet	Cmdr. James H. Spotts	10
13. Brooklyn	Capt. James Alden	26
14. Shenandoah	Capt. Daniel B. Ridgley	6
15. Powhatan	Commo. James F. Schenck	24
16. Seneca	Lt.Cmdr. Montgomery Sicard	5
17. Juniata	Capt. William Rogers Taylor	14

Gun Line #3

1.	Fort Jackson	Capt. Benjamin F. Sands	11
2.	Santiago de Cuba	Capt. Oliver S. Glisson	11
3.	Tacony	Lt.Cmdr. William T. Truxton	12
4.	Osceola	Cmdr. J. M. B. Clitz	10
5.	Chippewa	Lt.Cmdr. Aaron Weaver	6
6.	Sassacus	Lt.Cmdr. John L. Davis	12
7.	Rhode Island	Cmdr. Stephen D. Trenchard	12
8.	Monticello	Act Volunteer Lt. Daniel A. Campbell	6

Reserves

1st Division

1.	Anemone	Acting Ensign William C. Borden	4
2.	A. D. Vance	Lt.Cmdr. John H. Upshur	5
3.	Cherokee	Acting Volunteer Lt. William E. Dennison	6
4.	Wilderness	Acting Master Henry Arey	4
5.	Howquah	Acting Volunteer Lt. John W. Balch	5
6.	Aries	Acting Volunteer Lt. Francis S. Welles	7

2nd Division

1.	Gettysburg	Lt. R. H. Lamson	7
2.	Eolus	Acting Master Edward S. Keyser	4
3.	Maratanza	Lt.Cmdr. George Young	6

3rd Division

1.	Malvern	Lt.Cmdr. Benjamin H. Porter	12
2.	Lillian	Acting Volunteer Lt. T. A. Harris	2
3.	Bigonia	Acting Volunteer Lt. Warrington D. Roath	3
4.	Emma	Acting Volunteer Lt. Thomas C. Dunn	8
5.	Nansemond	Acting Master James H. Porter	3
6.	Banshee	Acting Volunteer Lt. W. H. Garfield	3
7.	Keystone State	Cmdr. Henry Rolando	6

4th Division

1.	Governor Buckingham	Acting Volunteer Lt. J. MacDiarmid	6
2.	Britannia	Acting Volunteer Lt. Samuel Huse	6
3.	Tristram Shandy	Acting Master Henry Arey	4

APPENDIX B

Union Army Order of Battle--1st Assault

Unit	Division	Commander
Department of Virginia and North Carolina Maj. Gen. Benjamin Butler		
<u>Fort Fisher Expeditionary Force</u>		
<u>XXIV</u>		
2 nd Division	Brigadier General Adelbert Ames	
1 st Brigade	Brevet Brigadeer General N. Martin Curtis	
3 rd New York Regiment		Capt. George W. Warren
112 th New York Regiment		Lt.Col. John W. Smith
117 th New York Regiment		Col. Rufus Daggett
142 nd New York Regiment		Col. Albert M. Barney
2 nd Brigade	Col. Galusha Pennypacker	
47 th New York Regiment		Capt. Joseph P. McDonald
48 th New York Regiment		Lt.Col. William B. Coan
76 th Pennsylvania Regiment		Col. John S. Littell
97 th Pennsylvania Regiment		Lt. John Wainwright
203 rd Pennsylvania Regiment		Col. John W. Moore
3 rd Brigade	Col. Louis Bell	
13 th Indiana Regiment		Capt. Samuel Zent
4 th New Hampshire Regiment		Capt. John H. Roberts
115 th New York Regiment		Maj. Ezra L. Walrath
169 th New York Regiment		Col. Alonzo Alden
Artillery Brigade		
16 th New York Light Artillery		Capt. Richard H. Lee

XXV Corps

3 rd Division	Brigadier General Charles J. Paine	
2 nd Brigade	Col. John W. Ames	
4 th U.S. Colored Troops		Lt.Col. George Rogers
6 th U.S. Colored Troops		Lt.Col. Clark Royce

30 th U.S. Colored Troops	Lt.Col. Hiram A. Oakman
39 th U.S. Colored Troops	Col. Ozora P. Stearns

3 rd Brigade	Col. Elias Wright
1 st U.S. Colored Troops	Lt.Col. Giles H. Rich
5 th U.S. Colored Troops	Col. Giles W. Shurtleff
10 th U.S. Colored Troops	Lt.Col. Edward H. Powell
37 th U.S. Colored Troops	Col. Nathan Goff, Jr.
107 th U.S. Colored Troops	Lt.Col. David M. Sells

Artillery Brigade	
3 rd U.S. Regiment Artillery, Company "E"	Lt. John Myrick

APPENDIX C

Union Naval Order of Battle--2nd Assault

Vessel Name	Captain/Master	Guns
Monitor's		
1. Nonadnock	Cmdr. Enoch G. Parrott	4
2. Saugus	Cmdr. Edmund R. Colhoun	2
3. Canonicus	Lt.Cmdr. George Beiknap	2
4. Mahoapac	Lt.Cmdr. Edward Potter	2
Gun Line #1		
13. Nyack	Lt.Cmdr. L. Howard Newman	8
14. Pontoosuc	Lt.Cmdr. William G. Temple	12
15. Pawtuxet	Cmdr. James H. Spotts	10
16. Seneca	Lt.Cmdr. Montgomery Sicard	5
17. Maumee	Lt.Cmdr. Ralph Chandler	8
18. Yantic	Lt.Cmdr. Thomas C. Harris	5
19. Pequot	Lt.Cmdr. Daniel Braine	8
20. Huron	Lt.Cmdr. Thomas O. Selfridge	5
21. Unadilla	Lt.Cmdr. Frank M. Ramsay	6
22. Kansas	Lt.Cmdr. Pendleton G. Watmough	8
23. Tacony	Lt.Cmdr. William T. Truxton	12
24. Mohican	Cmdr. Daniel Ammen	9
25. Brooklyn	Capt. James Alden	26
26. New Ironsides	Cmdr. William Radford	20
Gun Line #2		
1. Minnesota	Commo. Joseph Lanman	46
2. Colorado	Commo. Henry K. Thatcher	50
3. Vanderbilt	Capt. Charles W. Pickering	16
4. Wabash	Capt. Melancton Smith	44
5. Mackinaw	Cmdr. John C. Beaumont	10
6. Susquehanna	Commo. Sylvanus W. Godon	18
7. Powhatan	Commo. James F. Schenck	24
8. Tuscarora	Cmdr. James M. Fraley	10
9. Juniata	Capt. William Rogers Taylor	14
10. Shenandoah	Capt. Daniel B. Ridgley	6
11. Vicksburg	Acting Master William Grozier	6
12. Ticonderoga	Capt. Charles Steedman	14

Gun Line #3

1.	Santiago de Cuba	Capt. Oliver S. Glisson	11
2.	Ft. Jackson	Capt. Benjamin F. Sands	11
3.	Oscoola	Cmdr. J.M.B. Clitz	10
4.	Sasacus	Lt.Cmdr. John L. Davis	12
5.	Chippewa	Lt.Cmdr. Aaron Weaver	6
6.	Cuyler	Cmdr. Charles H.B. Caldwell	12
7.	Maratanza	Lt.Cmdr. George Young	6
8.	Rhode Island	Cmdr. Stephen D. Trenchard	12
9.	Monticello	Lt.Cmdr. William B. Cushing	6
10.	Alabama	Acting Volunteer Lt. Amos R. Langthorne	10
11.	Montgomery	Acting Volunteer Lt. Thomas C. Dunn	6
12.	Keystone State	Cmdr. Henry Rolando	6
13.	Quaker City	Cmdr. William F. Spicer	7
14.	Iosco	Cmdr. John Guest	10

1st Division Reserve Line

1.	Cherokee	Acting Volunteer Lt. William E. Dennison	6
2.	Vance	Lt.Cmdr. John H. Upshur	5
3.	Wilderness	Acting Master Henry Arey	4
4.	Howquah	Acting Volunteer Lt. John L. Balch	5
5.	Aries	Acting Volunteer Lt. Francis S. Welles	7

2nd Division Reserve Line

1.	Gettysburg	Lt. R.H. Lamson	7
2.	Eolus	Acting Master Edward S. Keyser	4
3.	Moccasin	Acting Ensign James Brown	3

3rd Division Reserve Line

1.	Nansemond	Acting Master James H. Porter	3
2.	Lilian	Acting Volunteer Lt. T.A. Harris	2
3.	Emma	Acting Volunteer Lt. James M. Williams	8

4th Division Reserve Line

1.	Buckingham	Acting Volunteer Lt. James MacDiarmid	6
2.	Britannic	Acting Volunteer Lt. William B. Sheldon	6
3.	Tristram Shandy	Acting Volunteer Lt. Edward F. Devens	4

APPENDIX D

Union Army Order of Battle--2nd Assault

Unit	Division	Commander
Department of Virginia and North Carolina Major General Edward O. C. Ord		
<u>Fort Fisher Expeditionary Force</u>		
<u>Provisional Corps Commander</u> Brevet Maj.Gen. Alfred H. Terry		
<u>XXIV Corps</u>		
1 st Division		
2 nd Brigade	Col. Joseph C. Abbott	
	6 th Connecticut Regiment	Col. Alfred P. Rockwell
	7 th Connecticut Regiment	Capt. John Thompson
		Capt. William S. Marbie
	3 rd New Hampshire Regiment	Capt. William H. Trickey
	7 th New Hampshire Regiment	Lt.Col. Augustus W. Rollins
	16 th New York Heavy Artillery	Maj. Frederick W. Prince
	Company A, B, C, F, G, K	
2 nd Division	Brigadier General Adebert Ames	
1 st Brigade	Brevet Brigadier General N. Martin Curtis	
	Major Ezra L. Walrath	
	3 rd New York Regiment	Capt. James H. Reeve & Lt. Edwin A. Behan
	112 th New York Regiment	Col. John F. Smith
	117 th New York Regiment	Lt.Col. Francis X. Meyer
	142 nd New York Regiment	Lt.Col. Albert M. Barney
2 nd Brigade	Col. Galusha Pennypacker & Maj. Oliver P. Harding	
	47 th New York Regiment	Capt. Joseph M. McDonald
	48 th New York Regiment	Lt.Col. William B. Coan
		Maj. Nere Elfwing
	76 th Pennsylvania Regiment	Col. John S. Littell
	97 th Pennsylvania Regiment	Lt. John Wainwright
	203 rd Pennsylvania Regiment	Col. John L. Moore
		Lt.Col. Jonas Lyman
		Maj. Oliver P. Harding
		Capt. Heber B. Essington

3 rd Brigade	Col. Louis Bell & Co. Alonzo Alden	
13 th Indiana Regiment		Lt. Col. Samuel M. Zent
4 th New Hampshire Regiment		Capt. John Roberts
115 th New York Regiment		Lt.Col. Nathan J. Johnston
169 th New York Regiment		Col. Alonzo Alden
		Lt.Col. James A. Colvin

Artillery Brigade	
16 th New York Light Artillery	Capt. Richard H. Lee

XXV Corps

3 rd Division	Brigadier General Charles J. Paine
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2 nd Brigade	Col. John W. Ames	
4 th U.S. Colored Troops		Lt. Col. George Rogers
6 th U.S. Colored Troops		Maj. Augustus S. Boernstein
30 th U.S. Colored Troops		Lt.Col. Hiram A. Oakman
39 th U.S. Colored Troops		Col. Ozora P. Stearns

3 rd Brigade	Col. Elias Wright	
1 st U.S. Colored Troops		Lt.Col. Giles H. Rich
5 th U.S. Colored Troops		Maj. William R. Brazie
10 th U.S. Colored Troops		Lt.Col. Edward H. Powell
27 th U.S. Colored Troops		Col. Albert M. Blackman
37 th U.S. Colored Troops		Col. Nathan Goff, Jr.

Artillery Brigade	
3 rd U.S. Regiment Artillery	
Company E	Lt. John Myrick

Artillery Brigade	Brevet Brigadier General Henry Abbot
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1 st Connecticut Heavy Artillery	
Company B, G, L	Capt. William G. Pride

Engineers	Lt. Samuel O'Keefe
Company A, B, H	

APPENDIX E

Union Naval Contingent Order of Battle--2nd Assault

Ship	Division	Commander
<hr/>		
Naval Brigade	Lt.Cmdr. K. Randolph Breese	
1 st Division	Lt.Cmdr. Charles H. Cushman	
USS Colorado		Lt. H.B. Robeson
USS Losco		Acting Ensign W. Jameson
USS Malvern		Lt. Benjamin Porter
USS Monticello		Lt.Cmdr. W.B. Cushing
USS Nereus		Acting Ensign E.G. Dayton
USS Susquehanna		Lt.Cmdr. F.B. Blake
USS Ticonderoga		Acting Ensign George W. Coffin
USS Vanderbilt		Acting Volunteer Lt.Cmdr. Joseph Daniels
USS Wabash		Acting Ensign G.T. Davis
2 nd Division	Lt.Cmdr. James Parker	
USS Gettysburg		Lt. R.H. Lamson
USS Kansas		Acting Ensign George C. Williams
USS Mackinaw		Acting Master Abraham J. Louch
USS Minnesota		Lt.Cmdr. James Parker
USS Mohican		Commander not listed
USS Montgomery		Commander not listed
USS Osceola		Commander not listed
USS Rhode Island		Lt. Fred Smith
USS Santiago de Cuba		Lt. N.H. Farquhar
USS Seneca		Lt.Cmdr. Montgomery Sicard
USS Tacony		Commander not listed
USS Tuscarora		Lt.Cmdr. W.N. Allen
3 rd Division	Lt.Cmdr. Thomas O. Selfridge	
USS Brooklyn		Acting Ensign Douglas Cassel
USS Chippewa		Acting Ensign George H. Wood
USS Huron		Lt.Cmdr. Thomas O. Selfridge
USS Maratanza		Acting Master J.B. Wood
USS Powhatan		Ensign R.D. Evans
USS Shenandoah		Lt. Smith W. Nichols

Marine Division Capt. L.L. Dawson, USMC
(Marines volunteered from a majority of Porter's fleet, Dawson came from
USS Colorado)

Note the following ten ships provided contingents, but division assignment could not be
determined.

USS Canonicus	Commander not listed
USS Fort Jackson	Lt. Symmes H. Hunt
USS Juniata	Commander not listed
USS Pawtuxet	Acting Ensign Slamm
USS Pequot	Acting Ensign George Lamb
USS Pontoosuc	Commander not listed
USS Sasacus	Acting Ensign William H. Mayor
USS Saugus	Commander not listed
USS Tristram Shanoy	Commander not listed
USS Yantic	Commander not listed

APPENDIX F

Confederate Army Order of Battle--1st & 2nd Assault

Unit	Division	Commander
Department of North Carolina, 3 rd Military District (District of Cape Fear) General Braxton Bragg		
Maj.Gen. W.H.C. Whiting		Observer/Advisor (Military Gov)
Wilmington Garrison	Maj.Gen. Theophilus H. Homes	
6 th Battalion North Carolina Troops		Lt.Col. F.L. Childs
North Carolina Defense Troops		Maj. Franz J. Hahr
North Carolina Defense Troops		Capt. Henry P. Allen
North Carolina Defense Troops		Capt. E.D. Sneed
North Carolina Defense Troops		Capt. Bass
Sugar Loaf	Maj.Gen. R.F. Hoke	
Hagood's Brigade	Brig.Gen. Johnson Hagood	
7 th South Carolina Battalion		Lt.Col. James H. Rion
11 th South Carolina Battalion		Col. F. Hay Gantt
21 st South Carolina Battalion		Col. Robert Graham
25 th South Carolina Battalion		Capt. James Carson
27 th South Carolina Battalion		
Kirkland's Brigade	Brig.Gen. William W. Kirkland	
17 th North Carolina Battalion		Lt.Col. Thomas Sharp
42 nd North Carolina Battalion		Col. John E. Brown
66 th North Carolina Battalion		Col. John Nethercutt
Connally's Brigade	Col. John K. Connally	
4 th North Carolina Jr. Reserves		Maj. John M. Reece
7 th North Carolina Jr. Reserves		Maj. William French
8 th North Carolina Jr. Reserves		Maj. James Ellington
8 th North Carolina Sr. Reserves		Col. Allmond McKoy
Fort Fisher Garrison	Col. William Lamb	
36 th North Carolina Regiment, 2 nd Artillery	Col. William Lamb	
1 st North Carolina Battalion Heavy Artillery		Capt. James McCormic
1 st North Carolina Jr. Reserves		Maj. D.T. Millard
3 rd North Carolina Light Artillery		Capt. John M. Sutton
4 th North Carolina Jr. Reserves		Maj. John M. Reece

7 th North Carolina Jr. Reserves	Maj. William F. French
8 th North Carolina Jr. Reserves	Maj. James Ellington
10 th North Carolina Artillery	Maj. James Reilly
	Capt. Edward Walsh
	Capt. William Shaw, Jr.
13 th North Carolina Battalion Light Artillery	Capt. Zachariah Adams
36 th North Carolina Regiment Heavy Artillery	Capt. Daniel Munn
	Capt. Oliver Powell
	Capt. Samuel Hunter
	Capt. Daniel Patterson
	Capt. William Brooks
40 th North Carolina Regiment Heavy Artillery	Capt. Malcomb McBride
	Capt. Daniel Clark
	Capt. George Buchan
	Capt. James Lane
Confederate Navy Detachment	Lt. Robert T. Chapman
Confederate Marine Detachment	Capt. A.C. Van Benthuisen

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